

Through a Glass Darkly: the Assessment of Parenting Capacity
in the Context of Child Protection

A thesis submitted in fulfilment
of the requirements for the degree of
Doctor of Philosophy

By Sarah Whitcombe-Dobbs
BA, GradDipArts, MSc, PGDipChFamPsyc

Abstract

BACKGROUND: Parenting capacity assessment (PCA) in the context of maltreatment is complex and the stakes are high for children and families. Among parents where a formal PCA is undertaken due to child abuse or neglect, maltreatment is more pervasive and chronic than among other families involved with child protection services (CPS). Several methodological approaches to PCA have been published, but evidence is lacking for the predictive validity of these for subsequent harmful parenting among this population. In-depth assessments have not been evaluated, and actuarial methods are insufficiently specific for application to individual cases. Among parents involved with CPS where harmful parenting is ongoing, some are likely to become ‘good enough’ parents, and some are unlikely to significantly improve within developmentally-appropriate timeframes. Accurately identifying parents who can and cannot change is not currently possible, leading to a situation whereby each case becomes a natural experiment over time. Children consequently grow up in families who do not sufficiently improve their parenting in response to support, exposing these children to continued suffering and adversity. Improving the predictive accuracy of PCA is therefore essential to providing child welfare interventions that reduce suffering, interrupt intergenerational cycles of maltreatment and optimise children’s chances to develop according to their potential.

AIM: This study firstly aimed to examine the evidence for parenting interventions that reduce child maltreatment among a population of parents who were known to have already harmed their children. The second aim was to conduct a scoping review of the published models of PCA for the child protection context. Finally, this study aimed to identify psychological characteristics that were predictive of subsequent notifications of harm among a population of CPS-involved parents whose youngest child remained in their day-to-day care.

METHODS: Participants were eligible for inclusion into the study if they were the parent of at least one child under the age of 11 years who had never been taken into out-of-home care (OOHC). They must also have reported several past notifications of harm, and had recent or ongoing involvement with CPS. Participants were recruited over an eighteen-month period via agencies providing parenting support services in collaboration with CPS in Christchurch, Aotearoa/New Zealand (NZ). This study measured participants' mood, emotional regulation, developmental histories, parenting self-efficacy, representations of the parent-child relationship (using the Working Model of the Child Interview) and parental reflective functioning during a three-hour, two- to four-session baseline assessment. Outcome measures were subsequent notifications of harm to CPS occurring during the eight months following the baseline assessment, entered as the 'total number' and 'presence or absence' of notifications. These notifications were tied to participants' CPS files rather than children's files, and applied to notifications regarding all children of the participant. 'Entry into care' was also a main outcome variable. Psychological constructs were examined as potential predictors. The primary methods for data analysis were bivariable correlations and regression analyses.

RESULTS: Twenty-nine participants out of an initial sample of 41 referred parents were recruited to the study, with complete information collected for 26 parents. The average age of the youngest child was 26 months, and the average age of the participants was 31 years. All but one parent (97%) reported at least one form of maltreatment during their own childhood, and half reported two or more. Approximately one-third of participants received one or more CPS notification during the eight months following assessment. No individual psychological constructs, nor cumulative risk scores, were significantly predictive of subsequent notifications of harm among the study sample. Parents with a higher number of children, and parents reporting experiencing neglect were more likely to receive subsequent notifications

(*OR* =2.7 and 6.5, respectively). A predictive model derived from latent discriminant analysis and stepwise logistic regression yielded three variables that, when combined, accurately classified 92% of parents as having a subsequent notification or not. These variables were having a higher number of children, reporting a history of neglect, and parents' poor awareness of their own and their child's emotional state.

CONCLUSION: Parental reflective functioning, attachment representations and other psychological characteristics related to parenting were not predictive of subsequent harm among the CPS-involved parents in this study, and no single psychological measure differentiated between parents with and without notifications of harm. Existing quantitative measures of some psychological constructs are likely to be invalid or unreliable for use in PCA with CPS-involved parents. Attachment and reflective functioning-related constructs may interact with other risk factors for individual parents in ways that are not yet clearly delineated by the evidence to date. CPS records, while currently the most robust indicator of actual harm occurring towards children, are blunt indicators of child maltreatment and more sensitive measures are needed to supplement these. Those conducting PCA in the context of child maltreatment may need to examine other methods for establishing risk for future harmful parenting, and should also be aware of the limitations of currently-available measurement tools for this population.

Co-Authorship Form

This form is to accompany the submission of any thesis that contains research reported in co-authored work that has been published, accepted for publication, or submitted for publication. A copy of this form should be included for each co-authored work that is included in the thesis. Completed forms should be included at the front (after the thesis abstract) of each copy of the thesis submitted for examination and library deposit.

Please indicate the chapter/section/pages of this thesis that are extracted from co-authored work and provide details of the publication or submission from the extract comes:

Chapter two:

Whitcombe-Dobbs, S. & Tarren-Sweeney, M. (2019). What evidence is there that parenting interventions reduce child abuse and neglect among maltreating families? A systematic review. *Developmental Child Welfare*. <https://doi.org/10.1177/2516103219893383>

Please detail the nature and extent (%) of contribution by the candidate:



*Sarah Whitcombe-Dobbs conducted the review and wrote the initial text (90%).
Michael Tarren-Sweeney supervised the thesis and assisted with editing and revising the manuscript (10%)*

Certification by Co-authors:

If there is more than one co-author then a single co-author can sign on behalf of all

The undersigned certifies that:

- The above statement correctly reflects the nature and extent of the Doctoral candidate's contribution to this co-authored work
- In cases where the candidate was the lead author of the co-authored work he or she wrote the text

Name: Sarah Whitcombe-Dobbs	Signature: 	Date: 30.1.2020
Name: Michael Tarren-Sweeney	Signature: 	Date: 30.1.2020

List of publications

- France, K. G., Annan, J., Tarren-Sweeney, M., & Whitcombe-Dobbs, S. (2016). Psychological practice with children, families and the agencies that care for them. In J. Rucklidge, W. Waitoki, J. Feather, & N. Robertson (Eds.), *Professional practice of Psychology in Aotearoa New Zealand*. (2nd ed.). Wellington: New Zealand Psychological Society.
- Whitcombe-Dobbs, S. & Tarren-Sweeney, M. (2019). What evidence is there that parenting interventions reduce child abuse and neglect among maltreating families? A systematic review. *Developmental Child Welfare*.
<https://doi.org/10.1177/2516103219893383>
- Whitcombe-Dobbs S.A. (2011). Building decoding fluency in children with reading delay and antisocial behaviour. *University of Canterbury* (Thesis)

Conference Contributions

- Whitcombe-Dobbs S., Tarren-Sweeney M.J. (2018, October). Intervention with maltreating parents: what works? *XV European Scientific Association on Residential & Family Care for Children and Adolescents International Conference (EUSARF 2018)*, Porto, Portugal (Conference Contribution - Published)
- Whitcombe-Dobbs S.A, Van Dyk, M., Ovens, S. (2015, April). Early childhood education & communities under stress: improving behavioural and emotional regulation through a centre-wide intervention. *Infant Mental Health Association of Australia and New Zealand Conference*, Queenstown, New Zealand (Conference Contribution - Other)
- Whitcombe-Dobbs S.A. (2014, November). The impact of Type 2 trauma in early childhood: intervention within the educational curriculum in Aotearoa/New Zealand. *7th Educational Psychology Forum*, Dunedin, New Zealand (Conference Contribution - Other)
- Whitcombe-Dobbs S.A. (2011, November). Building Decoding Fluency in Children with Reading Delay and Antisocial Behaviour. *4th Educational Psychology Forum*, Auckland, New Zealand (Conference Contribution - Other)

Acknowledgements

If doctorates were awarded for patience and kindness, Samuel Whitcombe-Dobbs would have several. As it stands, he will have to be satisfied with a sane and grateful partner. I would like to promise that the tables will now be turned, but after two decades I have learned to play to my strengths. I can promise more time and continued unpredictability, as long as there are stars above me.

Izak, Lucy, Josiah and Genevieve may feel as though they have grown up with a never-met fifth sibling: here it is, five years old and finally born. I do not think there are better children anywhere, certainly none that make me laugh so much nor feel so incredibly proud.

There are few people who are utterly trustworthy and kind, and to have that combined with immense knowledge, passion and generosity is even rarer. It has been a pleasure and a privilege to have worked under and alongside Professor Tarren-Sweeney.

Conducting research is one thing, but creating a thesis was uncharted territory. To have ready access to the inimitable Professor Schluter was a boon indeed. His expertise, warmth and thoughtful questions added value during the final year and were so appreciated.

Associate Professor Karyn France has provided many opportunities and given time to my learning and development for over a decade. I am so grateful for her loyalty, warmth and wisdom.

Having to respond to thesis-related enquiries from interested parents, friends and family has given me much-needed motivation, and pub-based conversations informed many of my strategic decisions. Melanie Patterson, Aileen Mackie-Hyndman and Amrita Namasivayam in particular have been persistently perceptive and encouraging. With his depth of systemic knowledge, Peter Whitcombe's expertise and advice was essential to this project's success.

There are several eminent academics who were shamelessly mined for advice early in the project. Anna Smyke, Harriet Ward, Helen Minnis and Louise Newman all gave freely of their time and knowledge to a very grateful student from the other side of the world (or the Tasman). Rory Ellis provided patient and professional education regarding statistics and was wonderfully responsive. Professor Neville Blampied gave excellent advice with warmth and humour.

Mihi mahana ki ngā Ngāi Tahu Research and Engagement Group for the advice and support. Annabel Ahuriri-Driscoll, Tracey Rohan, Kelly Tikao and Jim Anglem gave sensitive, sensible advice from their areas of expertise, mihi nui ki a koutou mō tō koutou tohungatanga.

The University of Canterbury Doctoral Scholarship made this research possible, and receiving it was the deciding factor in my enrolment.

Several non-governmental organisations generously gave staff time to this project. Their openness to hearing about new research, and collaborating to make it happen, was vital to this study's success. Oranga Tamariki staff members also contributed in collating the data, and Dr. McIlraith in particular was unfailingly courteous in the face of my relentlessness.

The people who chose to participate in this research gave their time, their hospitality and their often-difficult personal experiences knowing that they would not benefit directly themselves. It has been an honour.

Whether in care, with their families or no longer with us, the children and young people I have worked with over the years gave rise to this thesis and to my pursuit of research and practice in this field. I acknowledge their experiences; he mokopuna te taonga.

Table of Contents

Abstract	ii
List of publications	vi
Acknowledgements	vii
List of Figures	xviii
List of Tables	xix
List of Appendices	xix
List of Abbreviations	xxii
Glossary	xxv
Chapter 1 Child Maltreatment and Parents Involved with Child Protection Services:	
International and National Evidence	1
1.1 What is parenting capacity?	5
1.2 An historical overview	7
1.3 Definitions and terms in Aotearoa/NZ	9
1.4 International definitions and trends	11
1.5 Tensions and contradictions: the role of poverty and ethnicity	13
1.6 Characteristics of parents involved with child protection services	15
1.7 Societal stigma and parental engagement	17
1.8 Decision-making in child welfare	18
1.9 Structure and rationale for following chapters	23
Chapter 2 What evidence is there that parenting interventions reduce child abuse and neglect among maltreating families? A systematic review	
2.1 Abstract	26

2.2 Introduction	27
2.2.1 Timeliness and evidence-based interventions are lacking	29
2.2.2 Evaluation standards for targeted parenting interventions.....	30
2.2.3 What parenting interventions reduce child maltreatment?	31
2.3 Review Method	34
2.3.1 Search procedure.....	34
2.3.2 Selection criteria	35
2.4 Review.....	36
2.4.1 Participants and criteria for inclusion	36
2.4.2 Recruitment rates	37
2.4.3 Methodological approaches	38
2.4.4 Measures and follow-up periods	38
2.4.5 Intervention characteristics	38
2.4.6 Number of sessions and length of intervention.....	40
2.4.7 Main outcomes for maltreatment recidivism	40
2.4.8 Theoretical underpinnings of interventions	43
2.4.9 Moderating variables	43
2.5 Discussion and Directions for Future Evaluation Research.....	45
2.5.1 What evidence is there that parenting interventions reduced subsequent maltreatment rates?	45
2.5.2 Are there alternatives to using CPS records as an outcome measure?	46
2.5.3 Defining the study population.....	47

2.5.4 Alternative research designs	48
2.5.5 Limitations	49
2.6 Conclusion.....	49
Chapter 3 Models of parenting capacity assessment in child protection settings: A literature review.....	51
3.1 The role of parenting capacity assessments	52
3.2 Review method.....	54
3.2.1 Search procedure.....	54
3.2.2 Selection procedure.....	54
3.2.3 Document analysis procedure	55
3.3 Review.....	55
3.3.1 Were all of the models ecological?	60
3.3.2 Parent factors, child factors and interactional processes in each model	61
3.3.3 Guidance on synthesising and analysing data for decision-making and intervention planning	61
3.3.4 Parents' sense of responsibility.....	62
3.3.5 Attention given to process	64
3.3.6 Cultural identity, strengths-based assessment and institutional bias	64
3.3.7 Comprehensive models vs. focused models	65
3.3.8 Evidence for predictive validity.....	65
3.4 Strengths and limitations.....	66
3.5 Discussion	67

Chapter 4 Establishing the scope of Parenting Capacity Assessments: Parental psychological functioning, capacity to change, and reflective functioning	70
4.1 Parental capacity to change	71
4.1.1 Trans-Theoretical Model of change	72
4.1.2 Adaptations to the Trans-Theoretical Model of change	74
4.1.3 Intervention-based models of assessing parents' potential to change	76
4.2 Psychological characteristics of CPS-involved parents: assessing mental health, substance use, self-efficacy and mental monitoring.....	78
4.2.1 Substance use	78
4.2.2 Mood problems in parents	78
4.2.3 Parenting self-efficacy	79
4.2.4 Parental sense of responsibility for and awareness of the child.....	80
4.3 The role of attachment in PCA.....	82
4.3.1 Parental attachment styles, strength and associations with harmful parenting ...	82
4.3.2 Attachment disorders in children and child maltreatment	84
4.3.3 Methods for assessing attachment in PCA.....	85
4.3.4 Disorganised attachment: red flag or red herring?.....	86
4.4 Intergenerational transmission of trauma	88
4.5 Emotional regulation & parenting.....	89
4.6 Reflective functioning	90
4.6.1 Parental reflective functioning.....	91
4.7 The validity of PCA conducted in child maltreatment.....	95

4.7.1 Evaluation studies of PCA reports	96
4.7.2 Review of predictors of subsequent maltreatment.....	97
4.7.3 Limitations of PCA	99
4.8 Summary and synthesis: what questions remain?	100
Chapter 5 Methods.....	103
5.1 Study design	104
5.1.1 Justification for the design: competing designs	105
5.1.2 The selected design	107
5.1.3 Longitudinal design	108
5.1.4 Rationale for intensive assessments.....	108
5.2 Ethical considerations, institutional approvals and Māori consultation.....	109
5.2.1 Māori Consultation	110
5.2.2 Human Ethics - University of Canterbury	111
5.2.3 Risks and steps to mitigate these	112
5.2.4 Child, Youth and Family/Ministry for Children Oranga Tamariki (OT).....	113
5.2.5 Non-Governmental Organisations (NGOs)	115
5.2.6 Canterbury District Health Board (CDHB) – Gateway Service	116
5.2.7 Te Komiti Whakarite	116
5.2.8 New Zealand Health and Disability Ethics Committee	117
5.3 Study sample	117
5.3.1 Sampling frame.....	117
5.3.2 Sampling procedure	118

5.3.3 Selection criteria	119
5.4 Study factor measures: participant characteristics and parenting	119
5.4.1 Semi-structured interview protocol.....	119
5.4.2 Self-report psychometric questionnaires.....	123
5.4.3 Structured interview protocol	132
5.5 Outcome factor measures: subsequent child maltreatment and entry into care	135
5.6 Study procedure.....	136
5.6.1 Recruitment.....	136
5.6.2 Data gathering method.....	139
5.6.3 Informed consent	140
5.6.4 Psychometric assessment and questionnaires	142
5.6.5 Procedure for obtaining outcome data	142
5.7 Statistical plan	143
5.7.1 Scoring and coding procedures for each measure.....	143
5.7.2 Data analysis	148
Chapter 6 Participant Background and Psychosocial Measures	151
6.1 Participant flow	152
6.1.1 Recruitment issues	153
6.1.1 Participant motivations in participating	154
6.2 Sample characteristics: demographics, background information and main concerns.	154
6.2.1 Sample demographics	154
6.2.2 Participants' self-reported background experiences	155

6.2.3 Participants' main concerns	156
6.3 Participants' personal backgrounds.....	157
6.3.1 Schooling	157
6.3.2 Onset of problems	158
6.3.3 A good time in life	159
6.3.5 Self-reported coping strategies	160
6.3.6 Hopes and dreams for the future	162
6.4 Participants' Responses on Psychometric Measures.....	163
6.4.1 Self-reported drug use.....	163
6.4.2 Self-reported alcohol use	164
6.4.3 Self-reported emotional regulation difficulties	165
6.4.4 Self-reported parenting self-efficacy and satisfaction	167
6.4.5 Depression, Anxiety and Stress Scores (DASS).....	169
6.5 Researcher-rated measures.....	170
6.5.1 Parental focus on and attentiveness towards their child	170
6.5.2 Parental representations of the parent-child relationship.....	172
6.5.3 Parental representations of child – alternative coding procedure	173
6.5.4 Parental reflective functioning.....	175
6.5.5 Quality of participants' narratives	177
Chapter 7 Prediction of Subsequent Maltreatment Notifications and Reflective Functioning: Bivariable Associations and Regression Analyses	178
7.1 Notifications of concern: the dependent variable.....	179

7.2 Relationships between independent variables.....	180
7.2.1 Relationships between psychosocial background variables	180
7.2.2 Relationships between psychosocial and parenting data	180
7.2.3 Background experiences and psychometric scores.....	181
7.2.4 Relationships between parental representations, focus, reflective functioning and narrative quality	183
7.3 Background experiences as predictors of reflective functioning	184
7.4 Psychometrics, parental reflective functioning and parental representations: correlations and regression analyses	184
7.5 Relationships between dependent and independent variables.....	185
7.5.1 Relationships between independent and dependent variables	186
7.5.2 Participant demographics and subsequent notifications	186
7.5.3 Background experiences and subsequent notifications.....	187
7.5.4 Participants' narratives and subsequent notifications	188
7.5.5 Main concerns and notification status.....	189
7.5.6 Psychometric scores and notification status	190
7.5.7 Parental reflective functioning, WMCI classification and notification status ..	191
7.5.8 Item-level analyses: WMCI alternative coding schedule	192
7.6 Predicting subsequent notifications.....	194
Chapter 8 Discussion	197
8.1 Summary of main findings	198
8.2 Participants were a true maltreatment sample.....	199

8.2.1 Likely selection bias	199
8.2.2 Parents' reported experiences of child maltreatment.....	200
8.2.3 Notification rates.....	201
8.3 Does PCA predict subsequent maltreatment?	201
8.3.1 What are the implications for assessing parental RF as part of PCA?.....	202
8.3.2 Current PCA practices may not be fit for purpose.....	203
8.3.3 Cumulative risk models do not apply to very-high-risk parents.....	204
8.3.4 Possible predictors of subsequent notifications	205
8.4 Measures and methods	208
8.4.1 Substance use	208
8.4.2 Quantitative self-report measures of mood, emotional regulation and sense of competence	209
8.4.3 Background measures and method	211
8.4.4 Interview-based measures of attachment and parental reflective functioning..	212
8.4.5 Parental Reflective Functioning.....	214
8.4.6 Researcher-rated measures.....	215
8.4.7 The use of notification as proxy indicator of actual harm	219
8.5 Parents identifying as Māori	220
8.6 Limitations of the current study	222
8.7 Implications for research.....	224
8.7.1 Future studies similar to the present study.....	224

8.7.2 Decision-making in child protection: the need to establish current decision-making quality	225
8.7.3 Feasibility issues	226
8.7.4 Further research questions	228
8.8 Implications for practice.....	229
8.9 Conclusion.....	231
References.....	232
Appendices.....	278

List of Figures

Figure 1 Published academic works with the phrase "parenting capacity", by decade using a multi-database search.....	7
Figure 2 Overview of articles included and excluded in the review.....	35
Figure 3 Pathways of all children who were engaged with CYF in 2013 (white arrows added; Rebstock et al., 2015, p. 150).....	118
Figure 4 Recruitment steps to accessing eligible participants	136
Figure 5 Participant flow	153
Figure 6 Distribution of DAST-10 scores (n=27).....	164
Figure 7 Distribution of AUDIT scores (n=27)	165
Figure 8 Frequency of interpretive ranges for depression, anxiety and stress.....	170
Figure 9 Frequency distribution of Parental Reflective Functioning.....	176
Figure 10 Specificity, sensitivity and ROC curve for predictive model.....	196

List of Tables

Table 1 Retention rates and effect sizes for recidivism rates per condition	42
Table 2 Characteristics of parenting capacity assessment models.....	63
Table 3 Sample characteristics of participating parents (n=29).....	155
Table 4 Participants' self-reported background factors (n=29)	156
Table 5 Main concerns reported by participants (n=29).....	157
Table 6 Total and scale score means of present study alongside previous studies of self-reported emotional regulation using the DERS	166
Table 7 Correlations among DERS sub-scales and total DERS scores (n=27; Spearman's r)	167
Table 8 Participants' self-reported PSOC sub-scale scores, with normative means for comparison (n=27).....	169
Table 9 PFOCS item means (n=29).....	171
Table 10 Item-total and inter-item correlations on the PFOCS (n=29)	172
Table 11 Parental representations of the parent-child relationship on the WMCI in current study, non-clinical population and referred, traumatised mothers.....	173
Table 12 Item-level means and standard deviations for the WMCI: alternative coding schedule (n=26).....	174
Table 13 Item-level and item-total correlations for WMCI: alternative coding schedule (n=26).....	175
Table 14 Parental RF scores double-coded.....	176
Table 15 Narrative quality means and standard deviations (n=29)	177
Table 16 Distribution of prior, subsequent, and total notifications of harm (n=29).....	179
Table 17 Relationships between background factors (n=29).....	180
Table 18 Correlations among self-report psychometric measures (n=26).....	181

Table 19 Relationships between background experiences and psychometric scores (n=26)	182
Table 20 Relationships between parental representations, PRF and narrative quality (n=26)	
.....	183
Table 21 Background experiences as predictors of PRF (n=26)	184
Table 22 Co-predictors of WMCI classification and parental RF (n=26)	185
Table 23 Relationships between demographic factors and notifications (n = 29)	186
Table 24 Demographics and notifications (n=29)	187
Table 25 Background experiences as predictors for subsequent ROCs (n=29)	188
Table 26 Narratives of past and present experiences and subsequent notifications (n = 29)	189
Table 27 Reported main concerns and ROCs (n=29)	190
Table 28 Psychometric measures as predictors of subsequent, or any notifications (n=26)	191
Table 29 Parental representations, parental RF and the WMCI alternative coding as predictors of notification status (n=26)	192
Table 30 WMCI alternative coding items as predictors of notification status (n=26)	193
Table 31 WMCI alternative coding items as predictors of medium parental RF (n=26)	194
Table 32 Linear discriminant analysis coefficients	195
Table 33 Backwards stepwise regression for best predictive model	195
Table 34 Classification table for predictive model	196

List of Appendices

Appendix A Supplementary material: detailed table of studies	278
Appendix B Table of models of parenting capacity assessment in child welfare	287
Appendix C Application to the University of Canterbury Human Ethics Committee	294
Appendix D Response from the Ngāi Tahu Consultation and Engagement Group	307
Appendix E UC Human Ethics Committee Letters of Approval	308
Appendix F Field Activity Risk Management Plan	312

Appendix G Letter of Approval Oranga Tamariki	319
Appendix H Letter of Approval HDEC	320
Appendix I Letter of Approval Te Komite Whakarite.....	324
Appendix J Drug Abuse Screening Test	325
Appendix K Alcohol Use Disorders Identification Test.....	326
Appendix L Difficulties in Emotional Regulation Scale	328
Appendix M Parenting Sense of Competence Scale.....	331
Appendix N Depression Anxiety Stress Scale.....	333
Appendix O Parental Focus on their Child Scale	335
Appendix P Working Model of the Child Interview	336
Appendix Q Referral Form	340
Appendix R Pamphlet.....	341
Appendix S Information and Consent Forms	342
Appendix T Background Interview Coding Template.....	346
Appendix U Confidentiality Agreement Researcher	349
Appendix V Coding Sheets Working Model of the Child Interview.....	350
Appendix W Alternative Coding Schedule Working Model of the Child Interview	351
Appendix X Coding of Interview Transcripts: Supplementary Chapter	356

List of Abbreviations

AAI – Adult Attachment Interview

ARA - actuarial risk assessments

ASSIST – Alcohol, Smoking and Substance Involvement Screening Test

AUDIT – Alcohol Use Disorders Identification Test

BPD – Borderline Personality Disorder

CAPI – Child Abuse Potential Inventory

CDHB – Canterbury District Health Board

CERQ – Cognitive Emotional Regulation Questionnaire

CPS – Child Protection Services

CYF – Child, Youth and Family (see entry for Oranga Tamariki in glossary)

DASS – Depression, Anxiety and Stress Scale

DAST – Drug Abuse Screening Test

DERS – Difficulties in Emotional Regulation Scale

DSED – Disinhibited Social Engagement Disorder

DSM – Diagnostic and Statistical Manual

DUDIT – Drug Use Disorders Identification Test

ERQ – Emotion Regulation Questionnaire

FGC – Family Group Conference (see glossary)

GHQ – General Health Questionnaire

ICAST-P – ISPCAN Child Abuse Screening Tool – Parent version

ICC – Intra-class correlation

ISPCAN – International Society for the Prevention of Child Abuse and Neglect

IQ – intellectual quotient

MaaP – Me as a Parent

MAST – Michigan Alcoholism Screening Test

NGO – non-governmental organisation

NZ – New Zealand

OOHC – out-of-home care (see glossary).

OT – Oranga Tamariki (see glossary)

PAT – Parenting Assessment Team

PCA – parenting capacity assessment

PDI – Parent Development Interview

PFOCS – Parental Focus on the Child Scale

PMP-SE – Perceived Maternal Parenting Self-Efficacy

PRF – Parental Reflective Functioning

PSOC – Parenting Sense of Competency scale

PTSD – Post-traumatic Stress Disorder

PWI – Personal Wellbeing Inventory

QoL – Quality of Life

RAD – Reactive Attachment Disorder

RCT – Randomised Controlled Trial

RF – Reflective Functioning

ROC – referral of concern (see glossary)

ROC – receiver operating characteristic

SEPTI-TS – Self-Efficacy for Parenting Tasks Indexes

SUD – substance use disorder

TAF - Tuituia Assessment Framework

TTM – Trans-Theoretical Model

UK – United Kingdom

US – United States

UNCRC - United Nations Convention on the Rights of the Child

WHO – World Health Organization

WMCI – Working Model of the Child Interview

Glossary¹

Aotearoa – New Zealand; Te reo Māori name for the whole country

CPS-involved parents – this term is used throughout this thesis to refer to parents who have ongoing involvement with child protection services, i.e. a population of parents where there are concerns regarding child maltreatment

Family Group Conferences (FGCs) – mediated formal meeting between family members and professionals such as social workers and police to address either child welfare concerns or the criminal offending by a child or a young person.

Hapū – kinship group, clan, subtribe, made up of a number of whānau sharing descent from a common ancestor

He taonga te mokopuna – Māori saying ‘children are precious, children should be treasured’

Iwi – extended kinship group, tribe, nation, people

Kaupapa – topic, agenda, programme, theme

Kawa – Marae protocol

Koha – gift, present, donation, contribution; connotations of reciprocity within social relationships

Marae – the courtyard of a Māori meetinghouse

Māori – indigenous New Zealander, a word coined during colonisation to distinguish between indigenous people and colonisers. There is a unique relationship between Māori and

¹ Definitions for many of these entries are adapted from maoridictionary.co.nz, an online Māori dictionary.

the Crown in Aotearoa/NZ, which is underpinned by the Treaty of Waitangi (see separate Glossary entry)

Mātauranga – knowledge, wisdom, understanding

Oranga Tamariki (OT) – name of Aotearoa/NZ’s child protection service, formerly known as Child, Youth and Family (CYF) and re-branded during 2017 into the Ministry for Vulnerable Children Oranga Tamariki, and then re-branded to the Ministry for Children Oranga Tamariki. Literally translates to ‘healthy children’, or ‘child wellbeing’. This name has been controversial

Out-of-home care (OOHC) – this is a term for foster, kinship or institutional care arrangements for children not living with their families of origin

Pākehā – New Zealander of European descent

Referral of Concern (ROC) – notification of harmful parenting made to CPS

Tamariki – children

Taonga – treasure, anything considered to be of value or prized

Te ao Māori – the Māori world

Te Komiti Whakarite – the Canterbury District Health Board’s Māori health research committee for Māori consultation

Tikanga – correct procedure; the customary system of values and practices that have developed over time and that are embedded within the social context

Tino Rangatiratanga – self-determination; sovereignty (retained by Māori under the terms of the Treaty of Waitangi)

Treaty of Waitangi/te Tiriti o Waitangi – this is Aotearoa/NZ’s founding document, signed in 1840. Its principles include partnership, participation and protection for Māori in all areas of life and society

Whakataukī – proverb, saying, aphorism

Whānau – extended family, family group, the primary economic unit in traditional Māori society, modern usage often includes non-kin relationships

Whanaugna – relative, kin, blood relation

Whanaungatanga – relationship, kinship, sense of family connection, sense of belonging

Chapter 1

Child Maltreatment and Parents Involved with Child Protection Services: International and National Evidence

Child abuse and neglect causes suffering and long-term harm, and effectively reducing its incidence and severity is crucial to society and public health (Stoltenborgh, Bakermans-Kranenburg, Alink, & van Ijzendoorn, 2015). Most maltreated children remain in the care of their parents; only a small proportion are taken into foster, kinship or institutional care (Rebstock et al., 2015). For some who remain with their families of origin, maltreatment continues throughout their childhoods despite efforts to prevent and treat harmful parenting (Euser, Alink, Stoltenborgh, Bakermans-Kranenburg, & van Ijzendoorn, 2015). This chronic adversity accumulates, affecting many areas of wellbeing and functioning during development and into adulthood (Teicher & Samson, 2016). Among adults who have grown up experiencing child maltreatment, the risk of perpetuating or allowing similar harm to come to their own children is higher than for other parents (Thornberry & Henry, 2013). Family dysfunction and harm are transmitted within families throughout generations, although the exact mechanisms by which this occurs are not fully understood (Madigan et al., 2019). Cycles of involvement with child protection services, police, justice and mental health services can be seen as normal in families where trauma has become entrenched. The global lifetime incidence of self-reported child maltreatment is estimated to be around 13% for sexual abuse, 23% for physical abuse and 16% for neglect (Stoltenborgh et al., 2015). Severity, pervasiveness and chronicity vary considerably within these populations. From any perspective, whether it be public health, morality, economic, or social justice, the reduction of child maltreatment is needed. Child welfare services are tasked with preventing and treating child abuse and neglect, and intervene using methods ranging from the minimally-intrusive to the removal of the child from their family of origin. Yet there is currently only limited evidence to show that services intervene with maltreating families in ways that successfully reduce subsequent maltreatment (e.g. Euser et al., 2015; Jenkins, Tilbury, Hayes, & Mazerolle, 2018; Jonson-Reid et al., 2018).

Child protection services (CPS) are tasked with identifying families in which children are being harmed and taking action to reduce or eliminate this harm. Notifications, or referrals of concern (ROCs), are made to CPS to advise them of a child at risk or being maltreated. These can come from professionals working with families in other sectors, such as health and education, or from members of the public (Rebstock et al., 2015). In some families, immediate intervention is necessary and child removal into out-of-home care (OOHC; foster, kinship or institutional care) is the only way to keep a child safe. For many other families, however, this is not clear-cut and CPS investigate further to establish what, if any, harm has been done and make a decision about whether to intervene, refer to other agencies or close with no further action. Many cases are closed when it appears as though the children are safe, only to be re-opened again when a new notification is made to CPS. Children growing up in these families may eventually be taken into care after a period of time during which assessments are completed and interventions unsuccessfully attempted (Brown & Ward, 2014). These processes can take years, during which the child is exposed to further harm and uncertainty – and these children tend to have poorer mental health than those who are uplifted at younger ages (Simmonds, 2010; Tarren-Sweeney, 2008).

For children who are either uplifted at older ages or not at all, this situation is unjust and unwarranted. Ideally, initial maltreatment is identified early, and their parents are given the best available supports and interventions in order to parent safely. However, decision-making in child welfare is complex. Over-loaded CPS systems predicated on risk averse case-management can perversely lead to case closures when risk levels appear low (Fluke, Corwin, Hollinshead, & Maher, 2016; Lauritzen, Vis, & Fossum, 2018). In real-world settings, social workers sometimes make high-stakes decisions, regarding whether and how to intervene with maltreating families, based on limited information and without following

standardised approaches that ensure due consideration of all relevant factors (Bolton & Lennings, 2010; Fluke et al., 2016).

Estimation of risk for future harm among CPS-involved families is an imprecise science; although there is some evidence for the predictive accuracy of actuarial methods, the population is heterogeneous as are the typologies of child maltreatment (Bolton & Lennings, 2010; Shlonsky & Wagner, 2005; van der Put, Assink, & Stams, 2016). Risk prediction is only one part of decision-making, and a clinical estimation of parents' capacities to meet the needs of their children over the longer term forms an essential component of the decision-making process (Schlonsky & Wagner, 2005; Donald & Jureidini, 2004). Parenting capacity assessments (PCAs) completed by experts contribute to judges' and social workers' decisions about children's future placements, whether in OOHC or with their parents. There is ample evidence underpinning many components of PCAs, and this is described within this chapter. But there is little to no evidence supporting the reliability of PCAs in predicting which families will subsequently harm their children, and designing a study to examine reliability and validity is difficult (Ward, Brown, & Hyde-Dryden, 2014).

There are several psychological characteristics which seem important in parents who have histories of chronic maltreatment themselves or who are involved with CPS. Attachment, parental reflective functioning (RF), emotional regulation and mood all appear to be associated with differences in child outcomes and/or parent-child interactions (Berthelot et al., 2015; Ensink et al., 2019)

Examining a parent's responsiveness to intervention may be a key part of accurate PCA and informing risk prediction (Platt & Riches, 2016a). To assess this, parents who have been identified by CPS as harming their children are provided with intervention targeting specific parenting challenges. If changes occur that reduce harmful parenting and increase safe parenting, this suggests that the parents will continue to make or maintain changes

following case closure by CPS (Harnett & Dawe, 2008; Platt & Riches, 2016a). This estimation of parental capacity to change can supplement existing information gleaned through a PCA, providing a comprehensive foundation for current ‘best practice’ child welfare decisions (Vischer, Grietens, Knorth, & Mulder, 2017). However, none of these approaches have yet been evaluated for accuracy in predicting subsequent maltreatment among families involved with CPS.

This chapter begins with a brief description of parenting capacity and an overview of the history through the research literature. A summary of the Aotearoa/NZ child maltreatment context is provided, followed by the international consensus on definitions and terms regarding child abuse and neglect. Some broad tensions and contradictions in the field of child protection are highlighted, and CPS-involved parents are then described with a focus on the ways in which they may differ from a general population. Maltreating families experience societal stigma, as do the child welfare services that are tasked with ensuring child safety and wellbeing. Thus there is significant pressure on CPS to both preserve families intact *and* intervene effectively to prevent any harm to children, with every child welfare decision consisting of the weighing up of what can be significant risks. For the child, their future safety and development may be at stake; for the parents, the continued care of and access to their own child. This chapter concludes with a discussion of current decision-making practices in child welfare, and a brief rationale for the chapters that follow.

1.1 What is parenting capacity?

Definitions of parenting consistently refer to behaviours that lead to positive outcomes for children. A distinction must be made between the parenting that children need, and the parenting that they receive. The Merriam-Webster dictionary defines parenting simply as ‘the raising of a child by its parents’, which allows for all types of parenting, not just parenting that leads to beneficial outcomes for children (2013).

‘Good’ parenting can be defined as “those activities and behaviours of caregiving adults that are needed by children to enable them to function successfully as adults within their culture” (Jones, 2009, p. 283). There is no universally-applicable standard of parenting; classifying the quality of caregiving requires the consideration of context. Cultural values between societies differ, and parenting occurs in all cultures that enables children to grow up to participate as happy and healthy adults in their respective societies (Bornstein, 2012). Yet within cultures there are broad definitions of what children need and what parents ought to provide, and adequate parenting is heterogeneous – as are the definitions of what constitutes a family or a parent relationship.

Psychologists and other professionals are called upon to assess parenting capacities when a child has been harmed or is at serious risk of harm (Donald & Jureidini, 2004). In the absence of an agreed-upon set of criteria against which to measure parenting, this is a challenge. The definition of parenting capacity must include the potential for harmful parenting practices as well as the potential for appropriate parenting, yet in current parlance parenting capacity is defined as ‘the ability to parent in a “good enough” manner long-term’ (Conley, 2003, p. 16). The assessment of parenting capacity implies an evaluation of *quality*; this may amount to impaired capacity, or no capacity, or high capacity.

In relation to the formal evaluation of parenting capacity discussed in the following sections, psychologists, lawyers, magistrates and social/community workers in a United States (US)-based family court were interviewed about their views on what constitutes ‘good parenting’. Their answers identified six broad areas of agreement: insight and awareness of themselves, willingness and ability to parent, ability to meet the child’s day-to-day and long-term needs, the ability to put their child’s needs before their own, fostering attachment and a balance between consistency and flexibility (Eve, Byrne, & Gagliardi, 2014). While most parenting capacity assessment models include a strong focus on deficits, this study

highlighted that assessing parenting against a set of desirable parenting constructs (strengths) is relevant and useful.

1.2 An historical overview

A multi-database search for the English term “parenting capacity” yielded only nine books, journal articles or book chapters prior to 1980, and none prior to 1960. The decade of the 1980s yields more than five times that many works, and the 1990s even more so. Nearly 700 works containing the phrase were published in the first decade of the 20th century, and the last decade shows an even greater proliferation (see Figure 1).

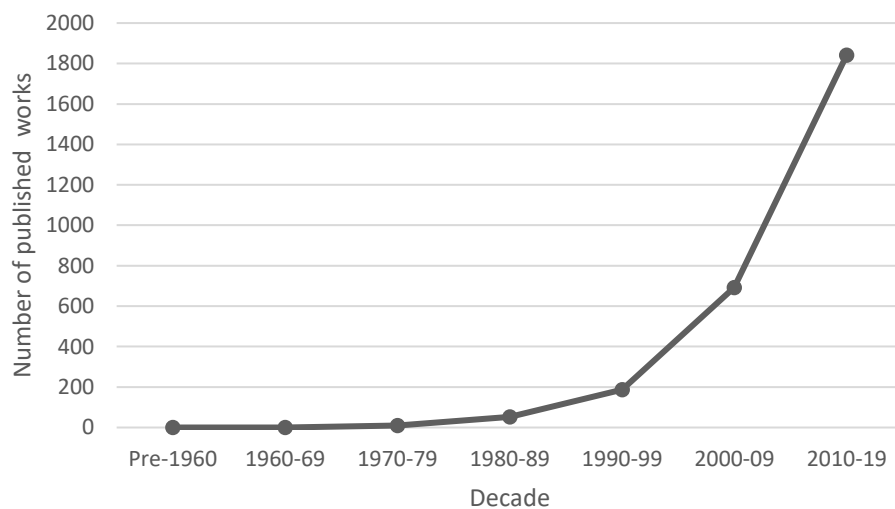


Figure 1 Published academic works with the phrase "parenting capacity", by decade using a multi-database search

The phrase arose within the academic literature in the early 1970s. All works during that decade were in the context of child maltreatment (seven works) or child custody disagreements (two works). Two of those early studies are notable, both published in the same volume of the journal *Child Abuse and Neglect*. The first examined Minnesota Multiphasic Personality Inventory (MMPI) profiles among high-risk mothers (subjectively judged to be so by involved health professionals), confirmed abusive mothers, and psychiatric

outpatients referred to the psychiatry department at a large general hospital (Gabinet, 1979). All groups showed similar profiles: high rates of depressive symptoms, rebelliousness, impulsivity and “cognitive pathologies” – and the author concluded that MMPI profiles were likely to be insufficient to identify potentially abusive adults, and that clinical assessments were likely to be a better method by which to measure parenting capacity (Gabinet, 1979, p. 377). The second study was set within a maternity hospital in Aotearoa/NZ, where detailed information on 200 expectant women was gathered with the goal of predicting subsequent child maltreatment and providing the appropriate levels of support within the community (Geddis, Monaghan, Muir, & Jones, 1979). Women were included if they were routinely seen by the social worker due to circumstances such as being single and unmarried, or if they were referred by other professionals due to concerns about them or their parenting. The domains for assessment included the mother’s: thoughts and feelings about the infant; childhood experiences and adjustment in adolescence; current self-concept; child-rearing experiences; and environmental factors such as relational supports, resources and family of origin. Sample characteristics denoted high rates of adversity such as social isolation, poor housing and psychiatric problems among the whole participant sample. Responses on each assessment were coded by the researchers for risks, and mothers were classified into four risk groups. The results did not show clear predictive ability of the assessment, but among the highest-risk group nearly a third (32.4%) did not have their children in their care at the end of one year, whereas only 2.8% of parents in the lowest-risk group had given up or lost care of their infant. Despite these large differences, the authors stated that risk predictions were altered during the follow-up period, meaning that estimations were based not solely on the assessment data from baseline, but also on behaviour demonstrated post-partum (Geddis et al., 1979).

These two studies illustrate research themes within the parenting capacity literature that persist until the present day: the desire to identify, through objective measurement, which parents are likely to subsequently harm their children, and the complexity and variety of the factors that influence parenting capacity. Researchers noted particular personality traits or behaviours seemingly common among maltreating parents, but when these were applied and tested for predictive validity, the evidence was insufficient for drawing firm conclusions about a child and a family's future (Gabinet, 1979; Geddis et al., 1979).

1.3 Definitions and terms in Aotearoa/NZ

The legislation governing child protection in Aotearoa/NZ is the Oranga Tamariki Act 1989, formerly the “Children, Young Persons and Their Families Act” (New Zealand Government, 1989). The Act outlines principles and procedures for ensuring children's welfare is paramount while addressing abuse and neglect within families. It also enshrined into law Family Group Conferences (FGC), a family-led formal decision-making process – not recognised by any other international jurisdiction at the time (Dyson, 2007). The Act defines child abuse as “the harming (whether physically, emotionally or sexually), ill-treatment, abuse, neglect, or deprivation of any child or young person” (s2, New Zealand Government, 1989).

The Act is based on four over-arching principles, that: (a) children be supported to express their views and that these be taken into account; (b) the child's wellbeing must be at the centre of decision-making affecting them; (c) the child's place within their family, hapū, iwi and family group be recognised; and that (d) the child's place within their community be recognised (section 5). Further to the second principle, the Act notes that: (i) children must be treated with dignity and protected from harm; (ii) the impact of harm should be addressed; (iii) the child's needs for a stable and loving home should be addressed; (iv) whakapapa and whanaungatanga responsibilities should be recognised (genealogy and extended family

responsibilities); (v) decision-making should occur and be implemented in a timely manner that is suitable for the age and development of the child; (vi) an holistic approach should be taken; (vii) efforts should be made to gain the support of the child; and, (viii) children with disabilities should be supported to fully participate in society without discrimination.

Further principles regarding the care and protection of children are given in Section 13 of the Oranga Tamariki Act 1989, and provide a snapshot of some of the complexities and tensions inherent in decision-making in child protection. These principles state firstly that any person making decisions about a child holds their best interests as paramount (the ‘paramountcy principle’, formerly in Section 6 which has now been repealed). The second principle states that any person making decisions about a child must be guided by the following principles, that: (a) early support should be provided to reduce risk of harm and improved safety; (b) those services should strengthen the family or whānau’s ability to care for the child and that this be done in a collaborative manner with those involved; (d) powers be “exercised [without consent] only to the extent necessary to protect a child ...from harm or likely harm”; (e) support be provided to families where children are at risk of being removed; (f) when children are at risk of removal, planning for long-term placement stability should start early and include alternative care arrangements; (g) a child should only ever be removed if they are “serious risk of harm”; (h) if indeed a child is removed, that they be returned to family or whānau “wherever that is possible”; and, (i) placements in OOHC should prioritise; family/whānau placements, living with a family, recognising whakapapa (genealogy), living with siblings and allow for belonging and attachment to develop (2a-2i, s13 (selected), New Zealand Government, 1989).

There is an implied tension between the terms “likely harm” and “serious risk of harm” and where and how they are used within the Act. The extent of harm caused to children by abuse and neglect, the estimation of risk of further harm and the delineation of

“serious” risk (as opposed to other types of risk) are subject to individual interpretation. Placement stability and security, while mentioned as ideals, are placed against the clear directive to return children to families of origin following removal. Overall, the revised Act strengthens the requirement to prioritise placement with, and the whakapapa and whanaungatanga responsibilities of, family and whānau at each procedural step – while retaining the paramountcy principle which ultimately allows for child removal into OOHC (Oranga Tamariki Ministry for Children, 2017).

Child removal from parents into state care is the most extreme intervention available to protect children from harm, and services can be oriented more strongly towards prioritising family preservation or child safety. This tension between parent rights and the paramountcy principle of a child’s best interests is not always well managed within current child welfare practice (Delfabbro, Borgas, Rogers, Jeffreys, & Wilson, 2009; Morris & Connelly, 2012; UNICEF, 1990).

1.4 International definitions and trends

Exploration of international jurisdictions’ child protection legislation is beyond the scope of this review. There are, however, broad consistencies in how nations view child welfare, and to date 196 countries have ratified The United Nations Convention on the Rights of the Child (UNCRC; United Nations Treaty Collection, 2019). The World Health Organization (WHO) defines child maltreatment as:

Child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child’s health, survival, development or dignity in the context of a relationship of responsibility, trust or power. (World Health Organization, 1999, p. 15).

The UNCRC explicitly refers to child abuse in articles nine, 19, 34 and 39 ("United Nations Convention on the Rights of the Child," 1989). Article nine acknowledges that removal into OOHC is sometimes necessary, stipulating that children should not be separated from their parents unless, due to child maltreatment, this is in the best interests of the child. Signatory nations are instructed to use all their legislative and governmental powers to protect children from maltreatment in article 19, and this article goes on to prescribe social support programmes for prevention and the "identification, reporting, referral, investigation, treatment and follow-up of instances of child maltreatment". Article 34 concerns the protection of children from sexual exploitation or abuse. For children who have been subject to maltreatment, article 39 instructs member states to provide psychological, physical and social services in aid of their recovery. Further to article 19, article 20 emphasises the desirability of *continuity of care* for children going into OOHC ("United Nations Convention on the Rights of the Child," 1989). Thus, the 196 states who have ratified UNCRC have explicitly committed to a child protection system that: calls for active intervention from the government to protect children from harm and to provide treatment when harm has occurred; allows for child removal in cases of maltreatment; and acknowledges that stability of placement is important for children who do go into OOHC.

Bryce (2018) reviewed the concept of *cumulative harm* in child protection legislation and compared Australian models to international approaches. Although the accumulated life impacts of childhood adversity are well-known, child protection systems have not directly addressed cumulative harm through research efforts or service design. International approaches to child welfare can be broadly conceptualised into those that focus on the legislative steps for child protection (Anglo-American nations), and those that take a holistic, family support view of child welfare (Nordic countries; Bryce, 2018; Gilbert, Parton, & Skivenes, 2011). In the former system, agencies may look at episodes and perpetrators of

harm, and their statutory response to this, whereas in the latter style child abuse is seen as being embedded within a wider, dysfunctional family system. Bryce (2018) notes that a family support approach may more easily allow for the consideration of accumulated effects of maltreatment, whereas this is less easily delineated within a statutory response model. Most systems are likely to contain elements of both approaches to child welfare. Weighting responses in favour of legal obligations at the expense of family support may inadvertently lead to mild to moderate cases being ignored until they reach higher thresholds of severity – in direct opposition to early intervention principles designed to prevent accumulated harm (Bryce, 2018).

1.5 Tensions and contradictions: the role of poverty and ethnicity

NZ Māori are the indigenous people of Aotearoa/NZ. Recent media coverage in Aotearoa/NZ has focused on the disproportionate representation of Māori among children being uplifted as newborn babies, but the problem extends well beyond care decisions made at birth. Māori are over-represented in those reported to Oranga Tamariki (OT; Aotearoa/NZ's statutory child protection service), but this over-representation increases rather than decreases as state intervention progresses to FGC and care orders (Cram, Gulliver, Ota, & Wilson, 2015; Rebstock et al., 2015). In one recent study of a 1998 birth cohort, rates of involvement with OT among Māori were three times higher than among Pākehā (New Zealand European, the dominant ethnic group), and twice as likely than among Pasifika (people who identify as having an ethnic origin from the Pacific Islands) (Rouland, Vaithianathan, Wilson, & Putnam-Hornstein, 2019). There has been a public discussion on the presence of institutionalised racism within the child protection system, leading to passionate calls for culturally-responsive practices and comparisons to Australia's "stolen generation" (Beddoe, 2019; Radio New Zealand, 2019). These perspectives are important, yet from 1991-2000, homicide rates of Māori children were 2.4 per 100,000 compared to 0.67 for Pākehā, and 0.76

for Samoan. There was no evidence for child homicide with the six other major Pasifika ethnicities, Cook Islander, Fijian, Niuean, Tokelauan, Tongan and Tuvaluan – whose combined New Zealand resident populations approximately equalled that of the Samoan people (Connelly & Doolan, 2007).

The common thread between ethnicity and involvement with CPS is poverty. Well-known health inequalities are replicated in the child protection system in Aotearoa/NZ; when nationwide CPS data are linked with deprivation data, patterns of systemic inequity emerge that align with international data (Featherstone et al., 2019; Keddell, Davie, & Barson, 2019). Children living in areas that were most-deprived had eighteen times the rate of FGCs than children living in the least-deprived areas. There was also some evidence to show that children who lived in smaller deprived areas, located in larger non-deprived areas, were twice as likely to be placed in OOHC than if they were living in a larger deprived area (Keddell et al., 2019). This provides some support to the notion that decisions about child uplifts are made partly on the availability of OOHC placements. Cases are prioritised according to urgency and severity, factors which are also influenced by court availability and overall caseloads (Wulczyn, 2017; Baumann et al., 2011; cited in Fluke et al., 2016). Therefore, some placement decisions may be made in terms of risks relative to these other influential factors.

Based on the strong evidence for a relationship between poverty and child maltreatment, addressing structural inequalities with a view to improving child wellbeing is a logical, foundational step (Keddell & Davie, 2018). Sociodemographic factors are useful for system-wide maltreatment prevention. At the individual level, they are also important considerations when analysing family systems and ecologies. When considered in isolation these factors are nonetheless insufficient to guide decision-making – even for children in very deprived families.

1.6 Characteristics of parents involved with child protection services

Significant differences are found between CPS-involved parents and parents from the general population across a range of areas. Parents involved with CPS are more likely to have experienced multiple disadvantages: they are poorer, have more children at younger ages, are less-educated, more isolated, more likely to have been maltreated as children and less likely to be employed than parents from the general population (Ben-Arieh, 2010; Simon & Brooks, 2017). Psychological dysfunction is also prevalent, with parents involved with CPS having higher rates of stress, depression, substance use problems and other psychiatric disorders than parents in the general population (e.g. Hammond, Eastman, Leventhal, & Putnam-Hornstein, 2017; Perepletchikova, Ansell, & Axelrod, 2012; Venta, Velez, & Lau, 2016). Studies examining the behaviours of CPS-involved parents are summarised below, but participants in these studies are unlikely to constitute the types of parents who are comprehensively assessed for their parenting capacity. These parents are likely to present more severely, with more problems across all indices than other, CPS-involved parents (Clark, Connell, & Budd, 2013).

Observable interactional behaviours vary between maltreating and non-maltreating parents. One meta-analysis of observational studies examined differences between physically-abusive and neglectful parents (Wilson, Rack, Shi, & Norris, 2008). Across 33 studies, parenting behaviours differed by maltreatment type and status; physically abusive parents engaged in more aversive behaviour towards their children, but were not distinguishable from non-maltreating parents by examining rates of involvement. Neglectful parents had lower rates of involvement than non-maltreating parents, but there was no difference between the groups on the amount of aversive behaviour displayed towards the child. Both neglectful and physically-abusive parents showed lower rates of positivity during observations than non-maltreating parents. Moment-by-moment interactions also show differences when examined closely, and these are likely to be inadvertent (Deitrich-MacLean

& Walden, 1988; Wilson et al., 2008). These include more parent-initiated relational ruptures and fewer parent-initiated relational repairs among maltreating mothers, along with physiological stress indicators that differ by maltreatment status (Skowron, Cipriano-Essel, Benjamin, Pincus, & Van Ryzin, 2013; Skowron, Kozlowski, & Pincus, 2010).

Parenting behaviours also fluctuate over time. One study followed 54 parent-child dyads where substantiated physical abuse had occurred in the last 12 months, and examined parenting behaviours over time using multiple methods that included direct observation and child report. Although trends were fluctuating and heterogeneous at the individual level, there was an overall deterioration, including an increase in flat affect, and a significant decrease in positive regard and sensitivity as children moved from preschool ages to their first two years at school (Haskett, Neupert, & Okado, 2014).

One study attempted to identify subtypes of CPS-involved families using latent class analysis on a range of measures for 504 open cases in Portugal (Matos, Moleiro, & Dias, 2014). Four groups emerged from the analysis. The first cluster was ‘neglectful families’, who were more likely to have low school attendance, and be single-parent households headed by younger mothers. The second cluster was ‘abusive families’, characterised by nuclear and step-families with high rates of ill-treatment, aggression, parental histories of maltreatment and substance use. The third cluster was termed ‘families with children-at-risk’, with younger children in disadvantaged locations who had been exposed to a range of risk factors, and many of whom were displaying psychological problems. The fourth cluster, ‘families of maltreated adolescents’, comprised of nuclear and step-families with children in the early teenage years, who were being maltreated, but whose families nevertheless contained a range of protective factors and fewer risk factors such as substance use or aggression (Matos et al., 2014, pp. 2058-2059). Children in OOHC in Aotearoa/NZ are likely to be more similar to the first two clusters, in that they have experienced more types of harm, including both abuse and

neglect (Biehal, Baldwin, Cusworth, Wade, & Allgar, 2018; Rebstock et al., 2015; Tarren-Sweeney, 2016)

Overall, parents involved with CPS have more challenges and are more disadvantaged, to a significant degree and across many areas of functioning, than families without CPS involvement. However, just as data from non-CPS-involved families should not be uncritically applied to CPS-involved families, it is likely that the qualities of parents being assessed for parenting capacity are different from other, CPS-involved parents.

1.7 Societal stigma and parental engagement

Parental engagement in CPS services is thought to predict outcomes, and thus increasing parents' 'buy-in' is actively prioritised by many social workers (Kemp, Marcenko, Lyons, & Kruzich, 2014). Engagement can be conceived as having two aspects, behavioural buy-in and attitudinal buy-in. The former refers to observable actions such as attending appointments, and the latter refers to whether a parent expects an intervention to be beneficial to them or their children (Staudt, 2007). While court systems favour behavioural compliance in evaluations of parenting capacity, attitudinal buy-in may be just as important as other indications as to the likelihood of positive change (Staudt, 2007).

Strengths-based social work practice models are well-known and propounded, yet the studies of CPS clients reveal that that parents do not experience their involvement with CPS workers as 'strengths-based' (Kemp et al., 2014). The stigmatising nature of CPS involvement is embarrassing, stressful and frightening for many parents, undermining their ability to truly commit to positive change when the threat of child removals is present (Kemp et al., 2014). This can lead to 'lip service' being paid to CPS, with parents attempting to convince their social worker of their own motivation while internally experiencing ambivalence, anger and a strong desire to get CPS to close their involvement (Kemp et al.,

2014; Yatchmenoff, 2005). In mandated child protection services, parental compliance with treatment is more likely than active participation (Yatchmenoff, 2005).

The stigma of CPS involvement may be evolving. Media portrayals of abusive parents are responded to by members of the public on social media, creating new narratives around child maltreatment. Reporting of child homicides leads to strong public condemnation and vilification of child abuse and abusive parents. At the same time, CPS are decried for failing to act to protect children who are harmed, as well as for removing children from ‘good parents’ into OOHC (Elder, 2019; Shadwell, 2016). Parents who have CPS involvement can comment publicly on news stories, describing their own experiences and views of the system. They may argue that CPS are criminalising ‘good’ parents while allowing the ‘real’ child abusers to get away with it ("Oranga Tamariki Facebook page," 2019). These narratives, along with long-standing flaws and biases within Aotearoa/NZ’s child protection system, have led to political action such as street protests and petitions (Guildford, 2019; "Hands off our Tamariki," 2019). In this way, stigma of CPS involvement may be being tempered by narratives that question the state’s right to intervene, and in doing so cast parents as victims rather than perpetrators.

1.8 Decision-making in child welfare

Within the child protection field, early identification of and intervention for child abuse and neglect are key to improving outcomes for children and reducing their day-to-day suffering. Recent government reporting has shown that in Aotearoa/NZ, children having their first care and protection FGC had on average more than four prior notifications to OT. This number has increased steadily since 2000, meaning that the delay between initially being brought to the attention of OT, and receiving support as an FGC outcome, is growing, despite the evidence showing that older age of entry into care is a predictive factor for adverse outcomes (Rebstock et al., 2015).

Decision-making within child protection is fraught with risk, and policy and practices change over time (Fernandez & Atwool, 2013). Social workers may not have the time or skills to assess children's vulnerability with enough depth to ascertain whether they are in need of OOHC. Action following maltreatment notifications in Aotearoa/NZ may include: closure with no further action; referral to a partnership agency for extra support such as parenting intervention or treatment for substance use; investigation and assessment (including parenting capacity assessment); convening a FGC; and, statutory responses such as implementing a support order or applying to the Family Court for custody or guardianship (Ministry of Social Development, 2016; Rebstock et al., 2015). In this way, decision-making within child protection services can result in extended assessment periods and monitoring of intervention plans and reviews of those plans that becomes an endless cycle of assessment and review without a decision being made (Ministry of Social Development, 2012; Simmonds, 2010). This leads to a child and her or his family living with the threat of separation while potentially being exposed to further harm (Berliner et al., 2015). Referred to as 'cumulative jeopardy', this chronic exposure once in the system can lead to serious and long-term harm, and indeed its effects undermine a child's chances of later placement permanency (Brown & Ward, 2014)

Paul Steinhauer, the author of seminal works on the assessment of parenting capacity, simply and clearly described the need for early identification of children in ongoing need of care and protection:

"...consistently abusive or neglectful parents may leave no alternative to removing the child and trying to minimize the risks. Rutter has shown that such children fare better in an adequate substitute family than when left in chronically inadequate biological families. There is danger in taking children into care even from such families but the risk of leaving them exposed to chronically inadequate parenting is

even greater...repeatedly shuffling children back and forth from foster home plays havoc with their emotional development by repeatedly interfering with attachment. Thus, the earlier one can identify families unable to provide a secure attachment and meet their children's emotional needs, the sooner one can protect children by placing them permanently in adequate substitute families” (Steinhauer, 1983, p. 469)

Although Steinhauer argues from the developmental case for the necessity of OOHC, a strong argument remains for the reduction and prevention of ongoing, day-to-day suffering for children in maltreatment families. While imperfect, being taken into OOHC is a necessary remedy and could be framed as child *rescue* rather than the removal. Children in need of OOHC should be identified as early as possible, but there is a lack of evidence-based and reliable methods for doing so (Brown & Ward, 2014). There are significant tensions within the decision-making processes in CPS, with social workers anxious to provide parents with every support and opportunity to parent adequately while also being obligated to ensure child safety (Brown & Ward, 2014). Furthermore, there is a fundamental contradiction inherent in child protection responses. Prevalence data based on self-report tell us that rates of child maltreatment are far higher than official estimates indicate, whereas of the cases referred to CPS, many do not result in CPS involvement or intervention being provided (López, Fluke, Benbenishty, & Knorth, 2015). Just as CPS differ in orientation with regard to statutory responses versus family support, decision making serves two functions: diagnostic and deterministic. The former establishes whether maltreatment has occurred, and the latter identifies supports and next steps. Both rely on uncertain information and occur under time pressures (López et al., 2015).

Research on the quality of decision making is hamstrung by the lack of knowledge of the ‘correct’ decision in many situations, due to the lack of information on outcomes. Yet decision-making *processes* can be examined for quality, if not accuracy (Léveillé &

Chamberland, 2010; López et al., 2015). Decisions are influenced by organisational factors, aspects of the case, external factors and factors related to the decision-maker (Fluke et al., 2016). Social workers' individual patterns and biases have been examined using case vignettes and administrative data, finding that individual orientations, years of experience and practice context do influence decision-making, more so than case-specific factors such as whether the mother wants the child removed (Benbenishty et al., 2015; Fluke et al., 2016).

A range of published tools are available for structured decision-making in child welfare, and for complex, severe cases encompassing areas of uncertainty, a transparent and consistent method is best practice (e.g. Bolton & Lennings, 2010; Léveillé & Chamberland, 2010). The implementation of a consistent approach improves the (presumed) quality and consistency of decision-making processes (de Kwaadsteniet, Bartelink, Witteman, ten Berge, & van Yperen, 2013), but evidence for specific tools yielding desirable outcomes is scant. One such tool, the 'Structured Decision Making' (SDM) model, has been implemented in some US areas and associated with increased placement stability for children in care (Wagner, Johnson, & Caskey, 2001).

An Australian study interviewed 30 frontline practitioners to find out what tools they used to aid in decision-making, finding that social workers were satisfied overall with the tools that they used but that there was a wide variety of approaches (Gillingham, Harnett, Healy, Lynch, & Tower, 2017). Most used the SDM, and the second-most-used tool was an online child safety guide, with the rest using other frameworks or no specific tools.

Qualitative data allowed deeper exploration into the way the tools were used, showing that for most social workers, the outcome of the tool was not applied without individual opinion or intuition, but they were also aware of the risks of complete subjectivity (Gillingham et al., 2017, pp. 52-53). For example, when the tool yielded scores that suggested low risk but this contradicted their views, they either adjusted their answers to increase scores or over-rode the

scores. In these instances, it was clear that the tool was insufficiently sensitive to the range of concerns a social worker might have, and therefore individual judgement was applied.

Overall, however, social workers were in still favour of using the tool as it was a systematic method to ensure all factors were considered (Gillingham et al., 2017).

One novel study examined social workers' consideration of specific alternative care placements when deciding on a child uplift (Arad & Wozner, 2001). Researchers asked 194 social workers in Israel to recall two cases, one in which they had decided to remove the child and one in which they had decided to leave the child in the care of their parents. They then asked the social workers to complete a quality-of-life (QoL) questionnaire regarding each child's home placement and the proposed or actual alternative placement. Responses were then analysed, comparing results for children who were removed and those that remained. The findings were unexpected, in that for both groups of children the social worker rated the perceived QoL in the alternative care placement as higher than in the parent's care – but there was a larger QoL gap between the two results for the children who were removed than for the children who remained. These findings suggest that social workers do appear to factor in the alternatives to the present situation of the child, and whether removal will effect a significant or a small improvement (Arad & Wozner, 2001).

Actuarial methods have also been considered and applied within child protection settings. There is a strong urge in government organisations to quantitatively operationalise high-risk decisions in order to ostensibly improve practice, yet the validity and ethics of this approach have been questioned (Oak, 2016). In reviewing actuarial risk assessments (ARA) along with the Tuituia Assessment Framework (TAF) required in CPS in Aotearoa/NZ, Oak challenges the notion that increased accountability and specificity improves social work practices (2016). Furthermore, she argues that the actuarial tools undermine social work principles in favour of neoliberal imperatives to reduce spending, protect the organisation and

increase efficiencies, and ‘fail to acknowledge contingency, complexity and the relational aspects of the social work practice’ (p. 121). The impact of the gradual erosion of critical analysis in CPS decision-making is not demonstrated via evidence, and to date there is no published evaluation of the ARA and TAF’s associations with outcomes such as rates of maltreatment and removals and child placement stability.

1.9 Structure and rationale for following chapters

This thesis is primarily focused on improving decision-making and outcomes for children whose parents have ongoing involvement with CPS. Most children in this population are likely to remain in the care of their parents despite ongoing maltreatment, with only a small proportion being taken into OOHC (Rebstock et al., 2015). For families who retain the care of their children, interventions that reduce harmful parenting are an essential component of child welfare practice. Despite its importance, the evidence supporting parenting interventions for this population and this purpose is unclear. A review was therefore undertaken to establish which parenting interventions, if any, are effective for CPS-involved parents. This systematic review comprises chapter two of the thesis, and although an essential part of this doctoral study, it was completed when the focus differed slightly from its present aims. The findings of this review have consequently informed the chapters following it, and suggest that the stakes for PCA in child protection are even higher than previously thought. If there are no well-established interventions that reduce subsequent maltreatment among CPS-involved parents, then the need becomes even more urgent to accurately assess parenting capacity and parents’ likelihood to change. The third chapter consists of a scoping review of published PCA models for child welfare contexts. The final introductory chapter canvasses the literature on psychological constructs relevant to parenting capacity, including parental reflective functioning, attachment, mood and emotional regulation. It also describes and reviews the literature regarding the assessment of parents’ capacity to change in response to

intervention. Thus the following three chapters cover topics pertinent to the overarching theme of this study: how to successfully identify, as early as possible, which parents are likely to sufficiently improve, and which parents are not able to do so within a timeframe that is developmentally-appropriate for their children.

Chapter 2

What evidence is there that parenting interventions reduce child abuse and neglect among maltreating families? A systematic review

The present chapter is a manuscript describing a systematic review that was recently published in a research journal. The publication details are:

Whitcombe-Dobbs, S., & Tarren-Sweeney, M. (2019). What evidence is there that parenting interventions reduce child maltreatment among high-risk families? A systematic review. *Developmental Child Welfare*. 1(4), 374-393. DOI: 10.1177/2516103219893383

Contributions: Sarah Whitcombe-Dobbs carried out the review and wrote the initial version of the article. Michael Tarren-Sweeney provided supervision and editing.

2.1 Abstract

In families where child abuse and neglect have already occurred, there is a strong imperative to provide interventions that reduce or eliminate harm done to children. Parenting programmes lack tailoring for the needs of maltreating parents, and maltreating parents themselves are a heterogeneous group with varying needs. The literature on the effectiveness of parenting interventions for high-risk parents is limited, and this scarcity of knowledge can result in child protection cases being treated as a natural experiment. For children who experience ongoing maltreatment by their parents, the most stringent test for effectiveness goes beyond an improvement in positive parenting skills – child abuse and neglect must reduce or be eliminated. The present review addressed the research question “*What evidence is there that parenting interventions conducted with parents who maltreat their children, reduce the incidence of further child maltreatment?*” Databases were searched for trials of parenting interventions where participants were maltreating parents and outcome data included an objective measure of child abuse and neglect. Nine studies satisfied the selection criteria and are summarised. Four studies reported a statistically significant difference between groups in favour of the intervention group for two parenting interventions, Parent-Child Interaction Therapy and SafeCare. However, the review concludes that none of the reviewed parenting interventions have been demonstrated to be effective at reducing all types of child maltreatment through a high-quality RCT. Previous research is compromised by several critical methodological limitations, including low participant recruitment and retention, and narrow selection criteria. Recommendations are offered for future research on parenting interventions that aim to reduce child abuse and neglect.

2.2 Introduction

The prevention of child maltreatment (child abuse and neglect), including the alleviation of serious and persistent maltreatment, is a social and public health imperative. Children experience the effects of maltreatment in multiple ways. Firstly, children experience maltreatment as fear-inducing, distressing, traumatic events that are physically and emotionally painful. Secondly, maltreated children experience a multitude of adverse developmental outcomes, affecting their biological, neurological, psychosocial and interpersonal functioning (Gilbert, Widom, et al., 2009; Hein & Monk, 2017; Teicher & Samson, 2016; World Health Organization, 2016). Thirdly, the effects of child maltreatment reverberate through the entire lifespan, and thence to one's offspring through intergenerational transmission of trauma and maladaptive attachments (Berthelot et al., 2015; Madigan et al., 2019).

The WHO provided a comprehensive definition of child maltreatment, which we adopt for this review:

Child abuse or maltreatment constitutes all forms of physical and/or emotional ill-treatment, sexual abuse, neglect or negligent treatment or commercial or other exploitation, resulting in actual or potential harm to the child's health, survival, development or dignity in the context of a relationship of responsibility, trust or power. (World Health Organization, 1999, p. 15)

The risks of adverse developmental effects are determined by such factors as the severity, complexity, chronicity and developmental timing of children's maltreatment exposure (Cowell, Cicchetti, Rogosch, & Toth, 2015; Kim-Cohen & Turkewitz, 2012). Drawing together findings from developmental neuroscience, behavioural genetics, and epidemiology, the *theory of latent vulnerability* proposes that the effects of early maltreatment on children's

development manifest as a complex phenotype arising from maladaptive alterations to multiple neurodevelopmental systems that underlie social behaviours, cognition, and emotional functioning (Cowell et al., 2015). These systems adapt in ways that help children cope with and survive maltreatment experiences in the short-term, but can be ultimately maladaptive for their long-term social and emotional functioning. The effects of this are carried forward into children's lives as heightened risk (i.e. latent vulnerability) for mental ill-health, relationship difficulties and other adverse developmental outcomes (Cowell et al., 2015). The relationship between maltreatment characteristics and later outcomes is moderated by other factors such as family stability, social supports, attachment relationships, and parent mental health, and individual traits such as temperament and coping strategies (Afifi & MacMillan, 2011; Edwards, Probst, Rodenhizer-Stämpfli, Gidycz, & Tansill, 2014; Lo et al., 2019). Thus the developmental consequences of maltreatment are shaped by transactional interactions over time between the individual and their environment (Cowell et al., 2015).

Children's maltreatment exposure varies in severity in terms of frequency and specific profiles of abuse or neglect, with the most severe form of maltreatment being potentially life-threatening (Jackson, Gabrielli, Fleming, Tunno, & Makanui, 2014; Pears, Kim, & Fisher, 2008). While all child maltreatment is harmful, the latter is profoundly harmful to children's present well-being and future psychological development (Debowska, Willmott, Boduszek, & Jones, 2017; Gilbert, Kemp, et al., 2009; Tarren-Sweeney, 2016). Children whose experiences fall within the less severe end of this spectrum constitute the majority of maltreated children, where the focus for intervention is family support and generic parent training. Children whose experiences fall towards the more severe end of this spectrum constitute a relatively small proportion of maltreated children remaining in the care of their biological parents. They tend to experience more severe, more chronic, more pervasive and

more diverse maltreatment (Tarren-Sweeney, 2016). Included in this group are children who have an ‘ongoing need for care’. What differentiates them from other children who experience this level and complexity of maltreatment is that their parents’ caregiving is not sufficiently amenable to change (e.g. in response to parenting interventions) within developmentally critical timeframes (Tarren-Sweeney, 2016; Ward et al., 2014). For other severely and persistently maltreated children, where assessment suggests that their parents could provide ‘good enough’ care within developmentally appropriate timeframes if they received an appropriate parenting intervention, the appropriate child protection response is timely referral to evidence-based parenting interventions that target their parents’ assessed difficulties (Platt & Riches, 2016a). Therefore, decisions about how best to protect children who experience serious and persistent maltreatment rely greatly upon assessment of parenting capacity and parents’ potential for change (including their willingness and motivation to change), as well as the availability of effective parenting interventions (Harnett, 2007; Ward et al., 2014).

2.2.1 Timeliness and evidence-based interventions are lacking

Child protection casework for children who experience serious and persistent maltreatment is compromised if child protection services (CPS) do not have access to parenting assessment services, and/or effective interventions for the parents of such children. A distinction must be made between research evidence for a general, or related, population, and evidence for a population of maltreating parents. The California Evidence-Based Clearinghouse for Child Welfare, for example, separates their ratings for ‘scientific evidence’ from the ratings of ‘relevance’ for practice in child welfare. Child protection services may prioritise evidence-based interventions, but the suitability of these for a population of maltreating parents is often not established (although this varies by country and jurisdiction). In this scenario, parents whose children remain in their care may be directed to interventions that have unknown

effectiveness for that population, based on a belief (or hope) that they *may* reduce harmful parenting. Without having the means to predict the success of parenting interventions, statutory child protection agencies adopt a “wait and see” approach. Every case thus becomes a *natural experiment*, whereby the success or failure of each successive intervention or service determines the agency’s next step. This can play out over an extended period of time, during which the child may be exposed to further maltreatment and inadequate nurturance in their parents’ care (Barratt, 2010; Simmonds, 2010) – or they reside in temporary OOHC. Although temporary OOHC protects young children from maltreatment, their relational development is compromised by movements in and out of care and movements within care, as well as by the qualified nature of temporary caregiving (Dozier & Lindhiem, 2006). This approach to the provision of critical interventions for our most vulnerable families would not be acceptable practice in other contexts, notably within public health services. We would argue that a child’s exposure to chronic maltreatment is a developmental emergency, and that the consequences of ineffective intervention with high-risk families are not adequately recognised or accounted for by statutory child protection authorities (Brown & Ward, 2014).

2.2.2 Evaluation standards for targeted parenting interventions

Most parenting intervention trials conducted with maltreating and other high-risk parents have been evaluated in terms of changes in pro-social parenting behaviours measured through direct observation and psychometric measures related to parenting (Hurlburt, Nguyen, Reid, Webster-Stratton, & Zhang, 2013; Zhou et al., 2017). But, is this sufficient for evaluating parenting interventions provided to families in which children experience serious and persistent maltreatment? The stakes are extremely high for these children, both in terms of their immediate physical and psychological safety, and their longer-term psychological development and well-being. In this context, ‘failure to improve’ is not a neutral event – it is a harmful outcome in its own right. It is also not enough that parents acquire positive

parenting skills through treatment, unless that also translates into meaningful reductions in subsequent child maltreatment. We would argue that the benchmark for effective intervention *for this population* is necessarily more stringent – parents need to manifest ‘actualised change’ (in psychotherapy terms), or behaviour changes that are generalised across all settings (in social learning theory terms). For these families, the minimum acceptable change is that parents can provide ‘good enough care’, such that the child no longer has an ongoing need for care. It also follows, that the only robust measures of treatment effectiveness for this population are post-treatment maltreatment reports to CPS.

2.2.3 What parenting interventions reduce child maltreatment?

Previous reviews have focused on either specific types of abuse reduction, such as physical abuse, or on the *prevention* of child abuse or neglect occurring in families who are considered to be at high risk for CPS involvement. A 2006 Cochrane review of the effectiveness of parenting interventions in reducing subsequent child maltreatment included only three studies that had measured effectiveness in terms of subsequent maltreatment reports (Barlow, Johnston, Kendrick, Polnay, & Stewart-Brown, 2006). Three included studies examined the impact of the parenting intervention on subsequent maltreatment incidence measured by reports of abuse or number of injuries. One group-based intervention programme used didactic instruction, problem-solving, modelling with vignettes and relaxation techniques. Among the eight participants in the intervention group, there were no further reports of abuse or neglect during the one year follow-up period (Wolfe et al., 1981). A second study examined the effects of cognitive behaviour therapy (CBT) to family therapy (FT), finding that there was a lower rate of parent-reported use of physical force among the CBT families, but no significant differences between groups on physical injuries (Kolko, 1996). The third study examined rates of physical abuse among families receiving Parent-Child Interaction Therapy (PCIT) compared to a community-based parenting programme, finding significant

differences between the groups on subsequent rates of physical abuse (36% in PCIT vs 49% in the community group; Chaffin et al., 2004).

A review of child maltreatment prevention interventions found that some home-visiting programmes (Nurse Family Partnership) and some universal approaches showed benefits, but evidence for effective treatment leading to reduced risk of child maltreatment was limited (MacMillan et al., 2009). The review identified Parent-Child Interaction Therapy as a promising treatment for physically-abusive parents, but noted that no study until 2009 had demonstrated an effective reduction in the recidivism of child neglect (MacMillan et al., 2009).

A recent comprehensive meta-analysis of 27 studies (combined N=4883) likewise pooled data from both prevention and treatment studies, finding a non-significant effect size in favour of parenting interventions of $d = 0.13$. That study also carried out separate meta-analyses on studies stratified by various treatment and sample characteristics, including a meta-analysis of six interventions with maltreating parents that measured subsequent maltreatment reports, finding an effect size of 0.35 in favour of the interventions (Euser et al., 2015). Of these six studies, one consisted of an unpublished dissertation (Bybee, 1985), one specified physical abuse only as its measure for effectiveness (Swenson, Schaeffer, Henggeler, Faldowski, & Mayhew, 2010), and one reduced subsequent physical abuse reports but not child neglect (Chaffin et al., 2004). The review did not examine the quality of these studies separately to the 21 preventative studies, so the robustness of their conclusion that parenting programmes are effective at reducing child maltreatment is not clear.

A more recent systematic review and meta-analysis of the role of parenting interventions in preventing child maltreatment yielded a combined effect size of 0.296 in favour of the parenting interventions, with a reduction in subsequent self-reported and

substantiated abuse (Chen & Chan, 2016). The authors examined sample type as a potential moderating variable, with participants who were maltreating parents in five studies yielding a combined effect size of 0.280. Objective measures of maltreatment were also examined as an outcome variable, with eight studies using official reports yielding a combined effect size of 0.208. Although it concluded that parenting interventions were an effective public health approach to preventing maltreatment, treatment effects among already-maltreating parents, using CPS reports as an outcome measure, were not reported (Chen & Chan, 2016).

Another comprehensive review ostensibly sought to restrict its coverage to studies that measured ‘hard markers’ (i.e. objective reports, self-report by parent or child, or above threshold score on selected psychometrics) of subsequent physical abuse (Vlahovicova, Melendez-Torres, Leijten, Knerr, & Gardner, 2017, p. 353). They therefore included some studies that measured strong proxy indicators of maltreatment, but that fell short of CPS reports. Additionally, one of the study selection criteria was that up to 85% of the study sample could include parents for whom there were no ‘hard markers’. Of the 14 included studies, seven had participant samples that included *non* physically abusive parents, with rates ranging from 37%-86%. The meta-analysis measured a statistically-significant 11% reduction in subsequent risk of physical abuse across four treatment studies, and in these studies the participant sample consisted entirely of maltreating parents. PCIT (in one study) and Project Support were effective treatment programmes, and Nurse Family Partnership and the second PCIT study yielded results showing non-significant effect sizes (Chaffin, Funderburk, Valle, & Gurwitch, 2011; Chaffin et al., 2004; Jouriles et al., 2010; MacMillan et al., 2005).

None of the reviews conducted to date therefore fully address the research question “*What evidence is there that parenting interventions conducted with parents who maltreat their children, reduce the incidence of subsequent child maltreatment?*” This question is

critical to child protection policy and practice. To address this research question, we conducted a systematic review of parenting intervention studies: (1) in which the participants were parents who had maltreated their children; and (2) that had measured post-intervention maltreatment events reported to CPS.

2.3 Review Method

2.3.1 Search procedure

Searches of the literature databases PsycINFO, PubMed, The Cochrane Library, and Google Scholar were conducted between June and August 2017. The search terms “parenting intervention,” “parenting program,” and “parent-child therapy” were individually combined with the terms “child abuse,” “child neglect,” “child maltreatment,” “child protection,” and “maltreating parents.” A total of 48 searches were undertaken, 47 of which returned less than 500 results. The exception was combining the terms “parent-child therapy” and “child maltreatment” into PubMed, which returned 713 articles. For this search only, results with the terms “review” or “prevention” in the title were removed, yielding 242 articles. The search terms “parenting intervention” and “child maltreatment” ($N = 444$) and then “parent-child therapy” with “child abuse and neglect” ($N = 132$) were the second and third most fruitful combinations. In addition to the database searches, ancestry searches were conducted using the reference list of review articles on the topic, found through the above searches. Finally, a search of Google Scholar and the California Evidence-Based Clearinghouse for Child Welfare was conducted using the aforementioned search terms in order to identify any literature that may have been overlooked. One further article meeting criteria was found through ancestor searching, and no further articles were found through the Clearinghouse or Google Scholar (see Figure 2 for a flow chart).

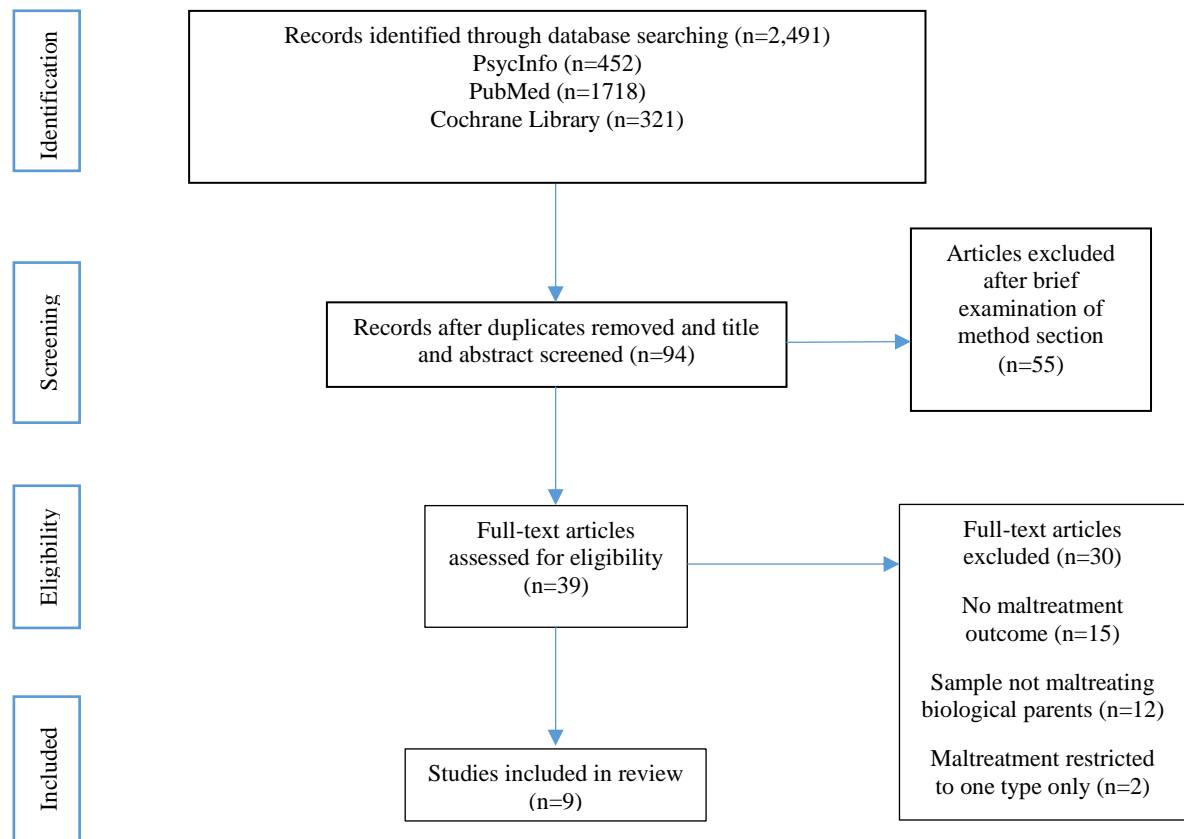


Figure 2 Overview of articles included and excluded in the review

2.3.2 Selection criteria

Studies located in the literature search were retained for review if they met the following selection criteria:

- i. Participants were parents who had allegedly maltreated their children, where the indicator for this was that they were referred for treatment by child protection services (due to reports of abuse or neglect) *or* parents where there were substantiated findings of child abuse or neglect
- ii. Study publication reports subsequent maltreatment reported to child protection services
- iii. Study publication reports findings of a parenting intervention

- iv. Study findings were published in a peer-reviewed journal
- v. Study findings were published after 1990 (due to significant changes in the last three decades in reporting patterns and conceptualisation of child maltreatment)
- vi. Maltreatment was not restricted one type only as the outcome variable – e.g. only sexual abuse or physical abuse, but included reports for all types
- vii. Publication did not describe findings from a single-case study
- viii. Publication was in English

2.4 Review

Nine studies met the selection criteria for inclusion in the review and are described below.

Further details, including risk for bias assessments and additional comments, are included in a *Supplementary Material* file hosted on the journal website. Unless stated otherwise, follow-up time periods are reported in months, and count from the baseline assessment rather than from intervention completion.

2.4.1 Participants and criteria for inclusion

Participant numbers ranged from 35 in the Project Support RCT (Jouriles et al., 2010) to 2,175 in the state-wide SafeCare trial (Chaffin, Hecht, Bard, Silovsky, & Beasley, 2012), with a total of 3,615 participants across nine studies (see Appendix A). In all studies, the participants had previous or current CPS involvement (Chaffin et al., 2004; Gershater-Molko, Lutzker, & Wesch, 2002; Jouriles et al., 2010; Maher, Marcynyszyn, Corwin, & Hodnett, 2011), were reported as being an “open case” with CPS (Oxford, Spieker, Lohr, & Fleming, 2016), and/or were referred for intervention by CPS (Chaffin et al., 2011; Chaffin et al., 2012; Jonson-Reid et al., 2018). Five out of the nine studies reported mean number of prior CPS reports among the study’s sample. This ranged from 1.2 in Study 6 (Nurturing Parenting Programme) to 6 prior CPS notifications among parents in Study 2 (the second PCIT trial).

Participants were excluded from studies for a range of reasons. Studies 1, 2 and 6 excluded parents for low IQ or cognitive impairment (Chaffin et al., 2004; Chaffin et al., 2011; Maher et al., 2011), and Study 8 excluded participants whose child had developmental delays or who were already receiving early intervention (Jonson-Reid et al., 2018). Three studies excluded participants who were alleged sexual abusers or where the reported abuse was sexual (Chaffin et al., 2012; Chaffin et al., 2004; MacMillan et al., 2005). Three studies excluded parents who did not speak English (Jouriles et al., 2010; MacMillan et al., 2005; Oxford et al., 2016), and one study excluded parents who did not have a home (Oxford et al., 2016). Studies 4 and 6 excluded parents for substance use (Jouriles et al., 2010; Maher et al., 2011), and Study 4 also excluded parents with severe psychopathology such as suicidality or active psychosis. Study 3 did not report criteria for inclusion or exclusion, and Study 9 did not fully report reasons for withdrawal (Chaffin et al., 2012; Gershater-Molko et al., 2002).

2.4.2 Recruitment rates

Where reported, recruitment rates varied from 23% of the initial sample in the study of Promoting First Relationships (PFR), to 91% of the referred families in NPP (Maher et al., 2011; Oxford et al., 2016). Recruitment methods varied considerably across studies, with most having participants referred for treatment from CPS. The PFR study used direct calling of eligible participants from CPS databases – yielding a much lower participation rate than the other studies that used CPS referrals such as the NPP or nurse home-visiting. The mean recruitment rate across all studies was 56%. The NPP study used a state-wide sample of all CPS-referred families, and evaluated the intervention’s effectiveness via association of outcome with how much of the intervention itself was delivered to parents. This ambitious approach included all eligible families, demonstrating that real-world research at this scale and in the child maltreatment field is achievable (Maher et al., 2011). Likewise, the state-wide trial of SafeCare (Study 9) demonstrated the feasibility of implementation and

researching of a manualised parenting intervention with a maltreating parent population (Chaffin et al., 2012).

2.4.3 Methodological approaches

Seven of the nine studies were randomised controlled trials (Jonson-Reid et al., 2018; Jouriles et al., 2010; MacMillan et al., 2005; Oxford et al., 2016). (Chaffin et al., 2004; Chaffin et al., 2011; Chaffin et al., 2012). One study, the first SafeCare trial, used a matched comparison group with no randomisation to condition (Gershater-Molko et al., 2002), and Study 6 (NPP) was a state-wide pre-post trial with no comparison group (Maher et al., 2011).

2.4.4 Measures and follow-up periods

Most studies used simple count data of CPS reports. Further examination or differentiation of CPS records was made in some studies: researchers checked records for duplicated events in Study 2 (Chaffin et al., 2011), differentiated between reported and substantiated maltreatment in Study 6 (Maher et al., 2011) and looked at both maltreatment rates and child removals during follow-up in Study 7 (Oxford et al., 2016). Follow-up periods in all studies commenced from the gathering of baseline data prior to the intervention, and ranged from 12 months for Study 7 of Promoting First Relationships (PFR) to 72 months in Study 9, the second SafeCare trial (Chaffin et al., 2012).

2.4.5 Intervention characteristics

All interventions were manualised and included parent education. Studies 1 and 2 trialled PCIT, a clinic-based intervention using in vivo coaching, modelling and feedback with parents and children. Parents are required to reach mastery on the component skills of child-directed interaction before moving on to the next treatment phase (Chaffin et al., 2011; Chaffin et al., 2004). SafeCare, originally based on Project 12-ways, was trialled in studies 2 and 9 (Chaffin et al., 2012; Gershater-Molko et al., 2002). This home-based intervention

taught child healthcare, bonding and safety, with an explicit aim to reduce future child maltreatment, including neglect. Parents' progress in achieving treatment goals on each of the three components was assessed in Study 2 using direct observation, and parents not reaching criterion were given one extra session (Gershater-Molko et al., 2002). Studies 4, 5, 7 and 8 trialled home visitation (Jonson-Reid et al., 2018; Jouriles et al., 2010; MacMillan et al., 2005; Oxford et al., 2016). Home visits were conducted by trained CPS workers using the Parents As Teachers programme in Study 8, and by trained public health nurses in Study 5. Key treatment components in both these trials were parent education and support, and in the case of nurse home-visiting, included referrals to other services. The trial of Project Support in Study 4 used licensed mental health practitioners to provide individualised, in-home parenting intervention which included practice and feedback with a focus on child behaviour management skills training and the parent-child relationship (Jouriles et al., 2010). While Study 7 was a home-visitation programme, the treatment modality was video feedback (Oxford et al., 2016). The trained, masters-level Promoting First Relationships (PFR) facilitators focused on increasing the parents' awareness of their own needs and the social and emotional needs of their child, without inducing guilt or shame. The Nurturing Parenting Programme (NPP) was trialled in Study 6, and is a group-based parenting programme with supplementary home sessions (Maher et al., 2011). Delivery modalities were varied but include skills training, role-play and family activities. The programme teaches parental self-awareness, empathy and emotional communication, as well as child development and behaviour management.

In three studies, further intervention enhancements were added and examined as to treatment effect. In Study 1, the first PCIT trial, a treatment condition "Enhanced PCIT" (E-PCIT) was included that added individualised services such as substance use or mental health treatment and home visits (Chaffin et al., 2004). In Study 2, the second PCIT trial a self-

motivating component was included and randomly trialled with both PCIT and Services As Usual (SAU; Chaffin et al., 2011). In Study 9, both intervention and comparison conditions were randomly assigned to “coached” (C) and “uncoached” (UC) conditions to examine the effects of quality control (Chaffin et al., 2012).

2.4.6 Number of sessions and length of intervention

Four studies reported number of sessions attended, yielding a mean of 24 sessions across those intervention conditions, ranging from 10 in Study 7 (over 10 weeks) to 46 in Study 5 which ran for two years (Jouriles et al., 2010; MacMillan et al., 2005; Maher et al., 2011; Oxford et al., 2016). Where total numbers of sessions were not reported, authors reported the frequency of sessions and approximate length of interventions. These ranged from about 24 sessions in Studies 1, 2 and 9 (weekly sessions for six months) to about 58 sessions in Study 8, which ran for nearly 14 months (Chaffin et al., 2004; Chaffin et al., 2011; Chaffin et al., 2012; Jonson-Reid et al., 2018). A median of 46 sessions was reported in Study 3, which ran over 24 weeks (Gershater-Molko et al., 2002).

2.4.7 Main outcomes for maltreatment recidivism

Seven of the nine studies reported rates of post-intervention CPS notifications (i.e. recidivism rates) within defined follow-up timeframes for intervention and comparison groups, while Study 6 (NPP) reported the recidivism rate for the intervention sample (the study had no comparison group). Between-group differences in binary recidivism rates are expressed as Odds Ratios in Table 1, along with a summary of other previously reported recidivism analyses. Of the nine reviewed studies, four reported statistically significant differences in the main measured outcome of reduced CPS notifications between intervention and comparison conditions, favouring the treatment condition, namely the two PCIT trials and the two Project SafeCare trials. The PCIT efficacy trial (Study 1) showed a significant difference between the treatment groups on rates of subsequent physical abuse reports but not neglect reports. The

PCIT plus self-motivation trial indicated a non-significant advantage of the ‘Self-Motivating (SM) plus PCIT’ condition over the other three conditions, except where parents did not have the opportunity to implement the skills due to having had their children removed from their care (Chaffin et al., 2011). While this suggests that PCIT may be efficacious when used in conjunction with SM, the ‘SAU orientation plus PCIT’ condition had the *highest* unadjusted abuse recidivism rate of the four conditions in the second PCIT study. The dismantling design allowed researchers to separate treatment effects of having been involved in the motivational component from being involved in the PCIT component, and results from both PCIT studies suggest that the SM component was an essential part of the improved outcomes (Chaffin et al., 2011).

Project SafeCare’s outcomes, while in favour of the intervention group, must not be considered as having the same robustness as the randomised trials – the groups were not randomised to condition, attrition rates were not reported, and there was insufficient reporting of participant characteristics by condition (Gershater-Molko et al., 2002). The second SafeCare randomised-cluster trial (Study 9) was well-designed and retained a very high proportion of the initial sample, also yielding lowered rates of subsequent maltreatment among parents in the intervention condition (Chaffin et al., 2012). Taken together with the first SafeCare trial, the intervention appears promising for reducing recidivism risk among a population of CPS-referred parents (Chambless & Hollon, 1998). Notably, the SafeCare intervention explicitly addressed child safety and monitoring with a goal of reducing child neglect as well as abuse (Chaffin et al., 2012).

Table 1 Retention rates and effect sizes for recidivism rates per condition

	Retention rate %	N completing ^a	Recidivism follow-up time ^c	Recidivism rate by condition	Odds ratios (95% CI)	Other recidivism analysis
Study 1: PCIT & E-PCIT	36.7	PCIT = 42 E-PCIT = 33 Control = 35 Total = 110	Median = 850 days	PCIT = 19% E-PCIT = 36% Control = 49% (physical abuse only)	PCIT vs control: <i>OR</i> = 0.25 (0.09 – 0.69, <i>p</i> = 0.007) E-PCIT vs control: <i>OR</i> = 0.61 (0.23 – 1.60, n.s.) PCIT vs E-PCIT: <i>OR</i> = 0.41 (0.14 – 1.17, n.s.)	Pairwise comparison of Kaplan-Meier survival analysis: PCIT group had significantly better survival than control group for physical abuse; no differences between the groups for neglect.
Study 2: PCIT & Self-Motivation	39.1	SM + PCIT = 34 SM + SAU = 41 SAU + SAU = 42 SAU + PCIT = 36 Total = 153	Median = 904 days (range = 229 – 1282)	SM + PCIT = 29% SM + SAU = 34% SAU + SAU = 41% SAU + PCIT = 47%	SM+PCIT vs SAU+SAU: <i>OR</i> = 0.61, (0.23 – 1.60, n.s.) SAU+PCIT vs SAU+SAU: <i>OR</i> = 1.32 (0.54 – 3.23, n.s.) SM+SAU vs SAU+SAU: <i>OR</i> = 0.76 (0.31 – 1.86, n.s.) SM+PCIT vs SAU+PCIT: <i>OR</i> = 0.47 (0.17-1.25, n.s.)	Adjusted recidivism rates with imputed data and survival analysis: SM+PCIT showed significant advantage over SM+SAU and SM+PCIT.
Study 3: Project SafeCare	Not reported	SafeCare = 41 Comparison = 41 Total = 82	36 months	Project SafeCare = 15% Comparison group = 46%	Project SafeCare <i>OR</i> = 0.20 (0.07-0.57, <i>p</i> = 0.002)	Wilcoxon (Gehan) statistic used to compare survival rates: SafeCare group had significantly better survival than comparison group.
Study 4: Project Support	46.1	Support = 17 Comparison = 18 Total = 35	20 months	Project Support: 5.9% Comparison condition: 27.7%	Project Support <i>OR</i> = 0.16 (0.02 – 1.57, n.s.)	None reported.
Study 5: Nurse Home-visiting	72.8	Nurse visit = 88 Comparison = 72 Total = 160	36 months	Nurse home-visiting: 43% Control: 33%	Nurse home-visiting <i>OR</i> = 1.52 (0.80 – 2.90, n.s.)	Unadjusted survival analysis using Wald chi-square test: no significant differences between groups on days to first incident. Hospital records showed significantly higher rates of subsequent maltreatment in intervention group than in comparison group.
Study 6: Nurturing Parenting Programme	91.3	NPP = 528 (no comparison)	24 months	NPP: 33.7%	Not applicable (no comparison group)	In a logistic regression predicting recidivism two years post-treatment, and controlling for likely confounding variables, recidivism odds dropped 3.8% (<i>p</i> < .01) for each additional NPP session after 3 sessions.
Study 7: PFR	23.1	PFR = 124 Comparison = 123 Total = 247	12 months	Promoting First Relationships: 29% Control: 31%	PFR <i>OR</i> = 0.79 (0.46 – 1.35, n.s.)	Survival analysis using hazard ratios: no significant differences between groups. Risk of removal by CPS was 2.5x greater in comparison group than in PFR group.
Study 8: Home-visitation	51.6	Home-visit = 93 Comparison = 77 Total = 170	18 months	Home visitation: 41.9% Control: 54.8%	Home-visitation <i>OR</i> = 0.60 (0.33 – 1.11, n.s.)	Among sample with only one CPS report (n=52) there was a significant treatment effect in favour of home-visitation using Rao-Scott chi-square.
Study 9: Statewide SafeCare	72	SAU + UC = 500 SAU + C = 522 SC + UC = 609 SC + C = 544	Mean = 72 months	SAU condition: 45% SC condition [†] : 34.65-38.6%	Not applicable (insufficient data reported)	Survival analysis using hazard ratios: significant differences with HRs ranging from 0.74-0.83 (95%CI = 0.58-0.98). Treatment compliance (i.e. not missing more than 3 sessions or refusing services) significantly predicted recidivism with a hazard ratio of 0.73 (95% CI= 0.57-0.94)

^a Number of participants completing intervention or comparison condition

^c Follow-up counted from baseline assessment, prior to intervention

[†] Estimated 12-month recidivism rate based on reported 'estimated number needed to treat' per 1000

2.4.8 Theoretical underpinnings of interventions

Interventions based on social learning theory, that involved live coaching and feedback as well as mastery requirements (requiring parents to attain a certain skill level before moving on to new skills), were common across both effective interventions. However, these treatment modalities were also used in studies that were ineffective. Project Support used similar approaches of behavioural modelling and practice, as did the Nurturing Parent Program (NPP), albeit without the mastery aspect (Jouriles et al., 2010; Maher et al., 2011). It may be that interventions based on social learning theory that include parent education, modelling, and feedback are more likely to be effective than other intervention approaches – but this cannot be firmly concluded by the evidence tabled in this review.

Other theoretical approaches were tested by studies showing no, or unclear, effectiveness. Promoting First Relationships (PFR) is relationship-based and references human-centred and attachment theories (Oxford et al., 2016). The Nurse Family Partnership used by Macmillan and her colleagues (2005) described no clear theoretical orientation, but reported methods suggest a combination of social learning theory and relationship-based interventions.

2.4.9 Moderating variables

Six out of the nine studies examined potential moderating variables and reported on their effects. In the second PCIT trial (Study 2), a higher parental age and higher number of children was associated with a longer time before a CPS report was made. A higher number of previous CPS reports was associated with a shorter time until a subsequent CPS report (Chaffin et al., 2011). In Study 3, the first SafeCare trial, families with lower maltreatment rates at baseline were less responsive to intervention than those with higher baseline maltreatment rates (Gershater-Molko et al., 2002). Child age and sex were examined as potential moderators for subsequent maltreatment in the home-visiting trial (Study 5), but

effects were negligible (MacMillan et al., 2005). Parents reporting histories of maltreatment in their families of origin were less likely to have subsequent CPS reports during six months following the NPP intervention, but parents with more children and lower education levels were more likely to have subsequent CPS reports (Study 6; Maher et al., 2011). The moderating variables examined in the home-visiting trial (Study 8) included prior CPS reports and depression at baseline (Jonson-Reid et al., 2018). Among families with CPS involvement prior to referral, there was no difference on subsequent maltreatment rates by treatment condition. However, among parents depressed at the baseline assessment, those that received the intervention condition responded to treatment at higher rates than those in the control condition (Jonson-Reid et al., 2018). In the second SafeCare trial in Study 9, the ‘coached’ condition was associated with lower rates of further CPS reports, but this was not a consistent effect. The authors further found that parents with pre-schoolers, who had no substance use disorder, responded better to treatment than those outside of those criteria (Chaffin et al., 2012). Although PFR showed no significant differences between groups on the main outcome, there were some small effect sizes on measures of parental sensitivity and parents’ understanding of toddlers (Oxford et al., 2016). Furthermore, children in the PFR condition were less likely to be taken into OOHC in the year post-intervention. Research has shown that interventions targeting parental sensitivity and attachment are more effective when they are of moderate length and use behavioural methods for delivery (Bakermans-Kranenburg, van IJzendoorn, & Juffer, 2003). The PFR approach aims to elicit and praise different attachment behaviours in parents rather than using a didactic approach. However, this well-designed RCT showed no differences between ten sessions of PFR and three 30-minute phone calls consisting of needs assessment and referrals (Oxford et al., 2016).

2.5 Discussion and Directions for Future Evaluation Research

2.5.1 What evidence is there that parenting interventions reduced subsequent maltreatment rates?

Two parenting interventions, PCIT and SafeCare, showed promising results across four studies (Chaffin et al., 2004; Chaffin et al., 2011; Chaffin et al., 2012; Gershater-Molko et al., 2002). The two PCIT trials were fully randomised to condition, whereas the two SafeCare trials lacked true randomisation. At this point, we lack robust evidence that existing parenting interventions are effective with maltreating parents, but some parenting interventions based on social learning theory show promising results.

Based on the studies reviewed here, long-term home visiting programmes for CPS-referred families are ineffective at reducing rates of subsequent maltreatment when compared to services as usual (Jonson-Reid et al., 2018; MacMillan et al., 2005). Likewise, the ten-week video-based intervention (PFR) showed no treatment effects on rates of CPS reports, but parents in the comparison group were more likely to have their children removed (Oxford et al., 2016). Parents attending more sessions of NPP (Study 6) did not differ significantly in rates of subsequent reported maltreatment from those who attended fewer sessions (Maher et al., 2011). Study 4 described much lower rates of subsequent maltreatment among participants completing Project Support, but group numbers were low as were overall rates of CPS reports among the sample, with differences between conditions being non-significant (Jouriles et al., 2010). However, given the promising effect size, Project Support may be worth exploring through a larger RCT. In summary, two factors may influence effectiveness: coaching to mastery for new parenting skills and including a child safety and monitoring component that targets child neglect. Other features such as live modelling, in-home support, long-term involvement, video feedback and supplementary supports were common across both effective and ineffective interventions.

2.5.2 Are there alternatives to using CPS records as an outcome measure?

Whether a CPS notification results in substantiation of maltreatment or not appears to have little bearing upon children's behavioural and developmental outcomes (Hussey et al., 2005). This has provided a justification for recruiting "high maltreatment risk" samples in place of confirmed maltreatment samples in parenting intervention studies (e.g. Thomas & Zimmer-Gembeck, 2011, p. 180); and for measuring treatment effectiveness in terms of 'soft predictors' of subsequent risk (such as structured clinical interviews, or scores on psychometrics such as the Child Abuse Potential Inventory) rather than subsequent maltreatment events (Milner, 1986). The advantage of this approach is that it circumvents the need to access CPS data, approval for which may incur lengthy and unpredictable negotiations. However, such risk measures do not appear to be sufficiently predictive of future maltreatment events for them to be used as proxy measures. In a recent study of physically abusive parents, approximately one quarter of parents "faked good" on the frequently-used Child Abuse Potential Inventory (CAPI), indicating that it is of limited use in identifying parents who presently or subsequently harm their children (Costello & McNeil, 2014; Milner, 1986). Other self-report measures are likely to be similarly compromised – if a parent is aware of societal expectations regarding parental attitudes and behaviours, they are likely to express these (if not necessarily display them). Similarly, a meta-analysis of observational studies of maltreating and non-maltreating parents found that older maltreating parents of older children were more difficult to differentiate from non-maltreating parents during behavioural observation tasks, than were younger maltreating parents (Wilson et al., 2008). Some proxy measures of maltreatment risk (such as self-report questionnaires and behavioural observations) may thus be more strongly associated with factors such as age, intelligence and 'awareness of societal expectations', than with subsequent maltreatment events. We would argue then that: (1) no psychological or behavioural measures are known

to adequately predict future maltreatment of children by parents who have previously maltreated their children; (2) interventions designed to reduce subsequent maltreatment should be primarily evaluated in terms of the incidence and characteristics of subsequent harmful events, as reported to CPS; and (3) treating a “high risk” sample of parents as equal to a sample of parents known to have maltreated their children risks being unable to differentiate treatments that are effective at preventing maltreatment from those that are effective at reducing maltreatment (Carr, Moretti, & Cue, 2005; Ward et al., 2014). There are likewise limitations to using CPS records as a proxy for true maltreatment prevalence. Families who are isolated may be less likely to be reported due to lower exposure to health and education services, and families already known to CPS may be more likely to be reported as professionals may observe more closely. Evidence from prevalence studies suggests that most child maltreatment does go unreported to CPS, so factors that influence CPS involvement in the first place must also be considered (Stoltenborgh et al., 2015). Whether greater CPS reports truly equates to greater maltreatment severity is beyond the scope of this review, but for a discussion and review of the evidence with regard to the recognition and reporting of child maltreatment, see Gilbert, Widom, et al. (2009).

2.5.3 Defining the study population

Where sufficiently reported, studies’ exclusion criteria limited sample sizes and representativeness. Common exclusion criteria included parents having an intellectual disability, engaging in severe substance use, and being an alleged perpetrator of sexual abuse. There is justification for excluding certain categories of parents from participant samples due to probable differences in maltreatment aetiology and mechanisms for change, such as parents who sexually abuse their children and parents with severe substance use problems. However, among the studies examined in the present review, families were excluded for a range of other reasons, notably: parents with intellectual disabilities (four studies); parents

with severe mental health problems (one study); and children having a developmental delay (two studies). There is a tension between ensuring sensible clinical decision-making for families with multiple urgent needs and providing the same treatment to the whole population; it is acknowledged that providing (for example) drug treatment or mental health treatment may be prioritised over parenting education . Yet there are much higher rates of psychopathology, substance use, learning difficulties and ‘difficult to engage’ parents among a population of parents who have maltreated their children than in the general population (Carr et al., 2005; De Bellis et al., 2001; McConnell, 2011). It may be that concurrent or stepped services should be provided, so that parents receive mental health treatment that supports their capacity to engage in parenting interventions. If an intervention is unsuitable for parents with multiple problems then it requires further modification for it to become fit for purpose (Tarren-Sweeney, 2013a).

2.5.4 Alternative research designs

A full description of the limitations of the use of RCTs for this population is beyond the scope of this article. However, the use of group averages as the prime focus of analysis in RCTs may not be sufficient to identify mechanisms for change, or characteristics of people for whom positive change occurs (and those for whom it does not, or does harm) (Blampied, 2013; Kravitz, Duan, & Braslow, 2004). An alternative strategy is to estimate effectiveness from rates of meaningful change within RCTs – namely comparing the proportions of treatment and control groups that respectively manifest meaningful improvement, versus meaningful deterioration, versus no meaningful change (Tarren-Sweeney, 2013b). A further alternative strategy for evaluating interventions designed for maltreating parents is to employ multiple-baseline single-case designs. The feasibility of a structured, small-scale experimental design has several advantages that complement the limitations of RCTs. The most significant advantage is the ease with which novel or innovative approaches in

interventions can be trialled. The use of single-case design takes advantage of this, meaning that clinicians with a scientist-practitioner orientation could contribute to the accumulation of a body of knowledge in this field (Blampied, 2013). Replication of intervention approaches is likewise feasible in single-case designs, and can be built into a single, iterative study. It also allows for examining treatment effectiveness using multimodal measures and constructs with greater clinical meaning than psychometric scores (Tarren-Sweeney, 2013b). When used alongside larger data sets within RCTs and longitudinal studies, single-case studies could contribute the detail and depth of case studies along with the scientific robustness of an empirically-sound research methodology.

2.5.5 Limitations

The present review considered only those studies that included an objective measure of child maltreatment for defining populations and outcomes. This therefore omitted a large number of intervention studies using closely-related measures and populations, which may also have findings relevant to the research question. Furthermore, due to the heterogeneity of the studies, a pooled effect size was not able to be calculated which would have provided a useful estimation of the current effectiveness of interventions for maltreating parents. While every effort was made to locate all studies conforming to inclusion criteria, studies published in languages other than English are not included.

2.6 Conclusion

At this point, the evidence is mixed as to whether existing parenting interventions are effective with maltreating parents, although both PCIT and SafeCare have been shown to have promising results. Some of the research carried out to date is compromised by methodological limitations, and two large RCTs demonstrate that long-term home-visiting programmes do not reduce subsequent maltreatment. Research within this population is acknowledged to be difficult, given the heterogeneity of the population and challenges with

recruitment and retention. Blinding participants and researchers to condition is impossible, and there are risks for families that, when managed, can undermine a study's validity and reliability. Yet the prevalence and seriousness of the problem of child maltreatment requires a sustained and systematic approach to evaluating different intervention approaches. The intervention trials reviewed in the present article contribute useful new knowledge, but a parenting intervention that reduces all types of child maltreatment among parents who have previously harmed their children has yet to be found and tested through a high-quality RCT. A strong need remains for further research into the reduction of child abuse and neglect, using a true sample of maltreating parents alongside objectively-measured child maltreatment outcomes.

Two priorities are clear: (1) the need to design new, or refine existing, interventions for this population, and (2) the need for improved evaluation studies. With regard to the former, the refinement of interventions needs to be guided more by research that demonstrates 'what does not work'. In the field of child maltreatment, this is particularly so as there is no known best practice approach. Pathways through CPS need to account for, and plan for, parents who do not engage in services and how to increase the chances of safety and wellbeing for the children in those families. To address the second need, evaluations should aim to use a representative sample of maltreating parents that *includes* parents with mental illness, substance use and disabilities. Evaluations should use multiple outcome measures that include an external measure of child maltreatment and ecological variables. Researchers should report the full range of outcomes in RCTs, fully describe the process for participant selection and fully report attrition rates. Ultimately, research using these principles will be invaluable in our quest to locate effective interventions to reduce the incidence of child abuse and neglect in a child welfare population.

Chapter 3

Models of parenting capacity assessment in child protection settings: A literature review

“There remains the possibility in all CPS cases that the termination of parental rights may occur. [...] this is an onerous responsibility to bear for an assessor as the implications of the recommendations have widespread impacts on many lives” (Budd, Felix, Sweet, Saul, & Carleton, 2006).

3.1 The role of parenting capacity assessments

Children’s wellbeing, outcomes and sometimes lives depend on child welfare workers making decisions in their best interests, and a key part of this decision-making process is the assessment of parenting capacity (Budd, 2005; Sanders, Colton, & Roberts, 1999). These assessments culminate in written reports, and are usually completed by a psychologist or social worker with expertise in the areas of parenting and child protection. Information about the child and the family is gathered by the assessor through multiple methods, forming the evidence underpinning the recommendations for next steps. Inherent in PCA is the assumption that in addition to establishing current parenting behaviours, the assessment is predictive of future parenting behaviour, i.e. the *capacity* of the parent to care adequately for their child. But, what is the evidence for the predictive validity of PCA undertaken in the context of child welfare? To answer this question, firstly the established models of PCA for child maltreatment should be canvassed, along with any evidence as to their fitness for purpose. The present chapter reviews the published literature on parenting assessment in the context of child welfare and identifies features in common across different models.

No previous critical reviews of PCA models for child welfare contexts have been published to date. One article has described various PCA models employed in child welfare contexts, but this was not a review (Choate, 2009). Choate (2009) argued that among the models described, there was agreement that PCA should aim to measure parenting capacity against a minimally-sufficient standard, but exactly what constitutes “good enough”

parenting thresholds is less clear. He pointed out that most families themselves hold an internal definition of what is ‘good enough’, which should be explicated, but there is a risk that undertaking PCA in child welfare contexts results in weighing up a family’s values and practices about parenting against those of the person conducting the assessment. Most PCAs contain key steps such as: framing the referral question; gaining consent; reviewing records; conducting psychometric testing; conducting interviews with parents, children and third-party informants; direct observation; and, case formulation and planning (Choate, 2009). However, that previous article was descriptive and instructional rather than a systematic review, and included some models for PCA in contexts other than child welfare.

There is a discrepancy between optimal methodological approaches recommended within the existing literature on PCA, and practice occurring within real-world settings (Budd et al., 2006). Deficiencies in current practice have been highlighted (such as many reports containing insufficient or irrelevant information), but there is no clear consensus within the literature regarding what constitutes the essential elements of PCA in child welfare settings. Given the stakes involved for children and families, there is a societal and professional interest in defining current best practice. Agencies and courts would benefit from having an evidence base against which the quality of the PCA reports they are commissioning could be measured. Further potential benefits include the ability to systematically evaluate the validity and reliability of the findings of PCAs in child welfare settings. To this end, the first step to identifying the key elements of a high-quality PCA in child welfare is to review the existing, published models or frameworks. The question for the present review is then “*What are characteristics of the published models of parenting capacity assessment in child welfare contexts?*”

3.2 Review method

3.2.1 Search procedure

A search of the literature databases PsychInfo, PubMed, Google Scholar and The Cochrane Library was conducted in May-June 2019. The search term “parenting capacity assessment” was combined with the search terms “child protection”, “child welfare”, “child abuse and neglect” and “child maltreatment”. For all databases bar Google Scholar, the most fruitful search combination was “parenting capacity assessment” combined with “child maltreatment”, yielding 22 results. “Parenting capacity assessment” combined with “child welfare” and “child protection” were the next most fruitful combinations, with 15 results each. Google Scholar searching yielded 17,400 – 17,900 (approximately) results for each combination of search terms, so only the first two results pages were reviewed, which were sorted by relevance. This yielded two further articles not identified through the other databases. Ancestor searching yielded two further book chapters that had not been found through the search terms. Publications were excluded if they were written for another purpose such as the cross-examination of expert witnesses (e.g. Clark et al., 2013), or if they described PCA frameworks for general use, such as parenting assessments for child custody proceedings (e.g. Farnfield, 2008; Moran & Weinstock, 2011).

3.2.2 Selection procedure

Studies located in the literature search were retained in the final review if they met the following selection criteria:

- i. Article or book chapter describes a model or framework of parenting capacity assessment in the context of child welfare, child maltreatment or child abuse and neglect;
- ii. Article or book chapter describes the model in sufficient detail as to identify the key components of the PCA were an assessor to follow that model; and,

- iii. Article or book chapter was published after 1990.

3.2.3 Document analysis procedure

Following inclusion, the key components of the PCA model or framework were summarised. These descriptions were used to identify the components of all models, and from these, superordinate categories were created that captured all key components. Models were then evaluated according to a set of 19 characteristics derived from the models themselves, and coded a 'yes' if the characteristic was explicitly mentioned (see Table 2).

3.3 Review

Twelve publications were located that described 11 models or frameworks of PCA in child welfare contexts and these are summarised below. Appendix B describes the models in more detail, along with comments regarding their strengths and limitations.

Model 1: Assessing parental capacity in a child welfare context

Budd (2005) recommends that each assessment has three features: a focus on parenting, using a functional approach and applying a 'minimum standard' to parenting. She describes three assessment phases, with planning forming the first phase. Assessors should review the background information and clarify the purpose of the assessment. Data gathering comprises the second phase and includes multiple methods over several sessions with a focus on the needs of the individual child. The third phase, report writing, consists of integrating the information into a report that assigns weight to various pieces of data, acknowledges strengths and weaknesses and provides potential future directions.

Model 2: Assessing for parental capacity; The least detrimental alternative: A systemic guide to case planning and decision-making for children in care

Steinhauer first described his recommended approach in 1983 and then more comprehensively in 1991, and the latter model is summarised here as representing both

publications (Steinhauer, 1983, 1991). There are nine guidelines falling under four areas of focus: the context, the child, the parent-child relationship and the parent. These cover situational stressors, a comprehensive developmental assessment, an assessment of the history and current parent-child relationship including attachment status, and the parent's individual characteristics that relate to parenting. Steinhauer recommends using profiles to assist in predicting parenting potential, and two groups of parent types are described with reference to specific behaviours, skills or attitudes (1991; p. 101-103).

Model 3 Child protection evaluations: the forensic stepchild

Kuehnle, Coulter and Firestone firstly state that assessors need to be suitably experienced and knowledgeable (2000). Their model is comprised of four factors, 11 sub-factors and 35 domains. The four factors are: parent factors, environmental factors, child factors and the parent-child relationship. Sub-factors are grouped under these headings, including attitudinal indicators in the parent such as skills, behaviours and history of intervention, along with the individual needs of the child based on their own history and experiences. The environmental factors include agency involvement, employment and the social and community context of the family.

Model 4: Assessing parenting capacity in child protection: towards a knowledge-based model

Houston's (2016) PCA model is rooted in social work principles, with three key themes: a strengths-based approach, a focus on the social ecology of the parent and a 'culturally sensitive and anti-oppressive' stance (p. 398). He describes seven dimensions for assessment, all of which are primarily focused on the parent. These include the 'key attributes of parenting', such as: skills, attitudes, behaviour and attachment; problem solving abilities; communication style; roles; affective responses towards the child; affective involvement with

the child; and finally behavioural control, which refers to the parent's disciplinary style and effectiveness.

Model 5: Parenting capacity

Donald and Jureidini's (2004) model describes both the process of and content needed for PCA. Seven steps are outlined, from initial confirmation of harmful parenting through to the report conclusions. The authors recommend that this final step include a description of the parent's sense of responsibility following feedback of the PCA to them, and that assessors include this information into the proposed plan for the future (p. 13). There are four primary domains described in the model, along with 'modulating effects': the 'child's parentability' and the 'scaffolding for parenting' available (p. 11). Domains one and two encompass the parent's capacity for relationship with their child and their sense of responsibility for the safety and wellbeing of their child. Domain three describes the parent's insight into the possible effects of their own experiences of being parented upon their parenting. Day-to-day care, including response to their child's individual physical and emotional needs, is covered by domain four.

Model 6: Evidence-based assessment of children and families: Safeguarding Children Assessment and Analysis Framework

The comprehensive Safeguarding Children Assessment and Analysis Framework (SAAF) model was developed to aid decision-making in the context of child protection, and is not limited to court settings as it explicitly includes other situations in which a PCA may be needed (Pizzey, Bentovim, Bingley-Miller, & Cox, 2017). Seven key principles underpin the framework: being child-centred and informed by child development; being ecological; identifying areas of strength as well as difficulty; being analytical and grounded in evidence and being aimed at improving child outcomes (Pizzey et al., 2017, p. 202). There are seven

stages of assessment outlined, from planning and initial risk assessment through to decision-making and planning at stage five. Two further stages extend this model to intervention planning based on the analysis (stage six) and the identification of outcome measures linked to the analysis and intervention plan (stage seven). Data collection is multimodal and includes the creation of a ‘chronology of salient information’, along with collecting information on the child’s developmental needs, the parent’s capacity, family and environmental factors (p. 204).

Model 7: Tuituia assessment framework

Although not published, this PCA model was included for this review as it was developed specifically for the Aotearoa/NZ system of child protection (Oak, 2016; Oranga Tamariki Ministry for Children, 2019). The Tuituia assessment framework contains three key domains, 15 sub-domains and 44 factors. The model provides questions for guiding the assessment of each sub-domain, along with scales providing definitions for three points on a 1-10 point rating scale. The first domain, mokopuna ora (child’s health and wellbeing) encompasses the child’s development, health, behaviour, identity and attachments. Kaitiaki mokopuna (parenting capacity), the second domain, covers basic care, parental functioning and mental health, skills and knowledge and the parent-child relationship. The third domain is te ao hurihuri, which refers to the family, sociocultural and environmental contexts for the child. This includes family and community supports and stability, along with the available resources.

Model 8: A suggested framework for forensic consultation in cases of child abuse and neglect

Barnum (1997) recommends approaching the assessment with four over-arching questions to ascertain the facts of what has happened, the harm that has been caused, the capacity of the parents and the prognosis for the future. A recommended structure to a PCA

report is given, beginning with history and history related to parenting and culminating in a summary and opinion. This latter part should be organised into sections covering the history of abuse and neglect, the impact of this on the child, the parenting capacity with regard to functioning and psychiatric health, risk and treatability. 'Amenability to treatment' should include recommendations and an estimation of the prognosis for these (p. 591). Few details regarding the specific components of parenting capacity are described, but these include the 'many areas of emotional, cognitive, social and behavioural functioning that go into being a good parent' (Barnum, 1997, p. 587).

Model 9: Assessing parenting capacity and parenting issues

Jones (2009) describes a model with six dimensions and seven considerations, and provides several matrices and checklists to aid in assessment. All domains are focused on aspects of parenting, including: basic physical care; ensuring safety; providing emotional care; supporting social, cognitive and physical development; and providing guidance and boundaries. Parenting should be viewed as occurring within a specific context and being tied to the needs of an individual child. The assessor should identify all caregivers of a child and all the settings in which parenting occurs. The stance of the assessor should be to: identify the strengths and difficulties of the parent within each dimension; maintain the perspective of the child; and, take a developmental view of both the parent and the children.

Model 10: Predicting maltreatment

Brown (1995) acknowledges multiple factors that impact on maltreatment, including the child, the family, the community and the culture. The focus of this model is on the assessment of the parent-child relationship, conceptualised by the author as the primary context in which abuse occurs. Five domains for assessment are outlined: the parents' knowledge and attitudes towards child-rearing; the parental perceptions of child behaviour

(noting any distortions); the parent's response to stress and emotional expressivity; and, the parent-child interaction.

Model 11: The evaluation of parental fitness in termination of parental rights cases: a functional-contextual perspective

This PCA model focuses on the role and behaviours of the parents, and the functional impact of any deficits on the needs and development of the individual child (Azar, Lauretti, & Loding, 1998). This 'functional-contextual' approach encompasses five skills areas and four domains for assessment. The domains for assessment are: parenting information; child information; information on the parent-child relationship; and, systemic information. This latter domain refers to engagement with agencies and other professionals as well as progress in treatment. The parenting skills areas identified for assessment include: parenting skills; social and cognitive skills; self-control; stress management; and, social skills. All of these skills areas pertain to skills in the parent rather than the child – child developmental history is covered under the 'child information' domain.

3.3.1 Were all of the models ecological?

All of the 11 models described the assessment of multiple domains of functioning. Eight models described "ecological-transactional" approaches, defined as including an analysis of the interaction between environments, or different layers of the family system (see Table 2). The three models that did not include this approach were more tightly-focused evaluative approaches, acknowledging context in general but focusing on particular aspects of the parent and the child rather than, for example, the role the extended family may play in supporting the child's development (Azar et al., 1998; Barnum, 1997; Browne, 1995;). Barnum's (1997) forensically-oriented model was the only published model that did not outline the need to

assess contextual factors, instead outlining four key questions to be answered within the suggested report structure.

3.3.2 Parent factors, child factors and interactional processes in each model

Most models included historical or background information about the parent, and all models included the assessment of parenting characteristics. All but one model explicitly included the direct assessment of the child. Houston's (2016) theme-based model includes strong social justice principles but emphasises overall 'tone' within the parent-child relationship in place of assessing the child independently. Only five of the models recommended that a child developmental history be taken, with the other models prioritising the child's current functioning and needs.

All models outlined the need to assess the parent-child relationship, aside from the SAAF model which referred to observing patterns and interactions between the child and the family rather than directing assessors to examine the nature of the attachment or relationship itself (Pizzey et al., 2017). Given the lack of recommendations for specific information to be gathered through the process, it is possible that the authors assume that assessors would gather this information within stage two of the seven-stage model (see Appendix B).

3.3.3 Guidance on synthesising and analysing data for decision-making and intervention planning

Six out of the 11 models provided information on how to analyse the assessment data and three of these six also provided structured decision-making tools and rating scales to use alongside. For those three models (Steinhauer, 1983; 1991; Pizzey et al., 2017; Jones, 2009), this comprised comparatively strong guidance on how to weigh up complex information about a family and make decisions based on these. Just two models (Jones, 2009; Pizzey et al., 2017) provided guidance on using the analysis and tools to identify priorities for

intervention. It was notable that no models recommended using a checklist or actuarial methods for risk assessment. The SAAF model uniquely went one step further and recommended that outcome measures for the intervention be identified at the assessment phase to enable review after implementation (Pizzey et al., 2017).

3.3.4 Parents' sense of responsibility

Assessing a parent's sense of responsibility for harm to their child was recommended in six of the models. Most of those omitting this piece were older publications (Azar et al., 1998; Barnum, 1997; Browne, 1995; Budd, 2005), but Houston's (2016) knowledge-based model was the exception to this. The method for measuring a parents' sense of responsibility, remorse or recognition for harm was not described in any of the models, and the reliability of this is questionable given the motivation for self-serving bias in any self-report measure for parents at risk of losing their children (Schmidt, Cuttress, Lang, Lewandowski, & Rawana, 2007)

Table 2 Characteristics of parenting capacity assessment models

Model characteristics	Authors	1. Budd, 2005	2. Steinhauer, 1983, 19991	3. Kuehnle et al., 2000	4. Houston, 2016	5. Donald & Jureidini, 2004	6. Pizzey et al., 2017	7. Oak, 2016; Oranga Tamariki Ministry for Children, 2019	8. Baarnum, 1997	9. Jones, 2009	10. Browne, 1995	11. Azar et al., 1998	Total
Ecological-transactional		yes	yes	yes	yes	yes	yes	yes	-	yes	-	-	8
Includes assessment of contextual factors		yes	yes	yes	yes	yes	yes	yes	-	yes	yes	yes	10
Includes parent background information & intervention response		yes	yes	yes	yes	yes	yes	yes	yes	-	-	yes	9
Includes assessment of parent characteristics		yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	11
Explicitly includes direct assessment of child		yes	yes	yes	-	yes	yes	yes	yes	yes	yes	yes	10
Includes child developmental history		-	yes	-	-	yes	yes	-	-	yes	-	yes	5
Includes assessment of parent-child relationship		yes	yes	yes	yes	yes	-	yes	yes	yes	yes	yes	10
Strengths-based & considers institutional bias		yes	-	-	yes	-	yes	yes	-	-	-	yes	4
Includes consideration of identity and culture		-	yes	-	yes	-	yes	yes	-	-	-	yes	4
Assesses parent's sense of responsibility for harm		-	yes	yes	-	yes	yes	yes	-	yes	-	-	6
Describes <i>process</i> of assessment as well as content		yes	yes	-	yes	yes	yes	yes	yes	yes	-	yes	9
Uses assessment process itself to add to assessment of capacity		-	-	-	-	yes	-	-	-	-	-	-	1
Provides guidance for synthesis of information and/or decision-making		yes	yes	-	yes	-	yes	-	-	yes	-	yes	6
Provides rating scales and/or descriptors		-	yes	-	-	-	yes	yes	-	yes	yes	-	5
Includes intervention planning related to analysis		yes	-	-	yes	yes	yes	-	yes	yes	-	yes	7
Includes measurement of intervention outcomes		yes	-	-	-	-	yes	yes	-	-	-	-	3
Includes step of identifying gaps in information or report limitations		yes	-	-	-	-	yes	-	-	-	-	-	2
Uses "good enough" parenting, or a minimally-sufficient model		yes	yes	-	-	-	yes	-	-	-	-	yes	4
Has been evaluated independently		-	-	-	-	-	yes	-	-	-	-	-	1
Total		13	13	6	10	11	15	12	6	11	5	12	

3.3.5 Attention given to process

All but two of the models included descriptions of the assessment process itself. The two models omitting process details appeared to assume competence in this area on the part of the assessor (Browne, 1995; Kuehnle et al., 2000). One model uniquely described, in addition to the process itself, the use of parents' responses to the assessment process in informing the outcome of the assessment itself. Specifically, parental behaviour and engagement during the evaluation was seen to be indicative of their likely future capacity and response to intervention (Donald & Jureidini, 2004).

3.3.6 Cultural identity, strengths-based assessment and institutional bias

A minority of the published models explicitly recommended assessing a parent's identity and culture (Houston, 2016; Oranga Tamariki Ministry for Children, 2019; Pizzey et al., 2017; Steinhauer, 1983, 1991). This was unexpected given the increase in cultural reports requested by the family court in Aotearoa/NZ (personal communication, Judge Strettell, 2019), and the acknowledged centrality of culture in determining parenting attitudes and behaviours (Bornstein, 2012).

Similarly, identifying and including parental strengths was recommended explicitly in only four models (Azar et al., 1998; Budd, 2005; Houston, 2016; Oranga Tamariki Ministry for Children, 2019). Budd (2005) provides a rationale for including strengths as being pertinent to the functional parent-child relationship, as well as providing the court with a picture of mitigating factors that are likely to influence future parenting. Houston's knowledge-based model is founded in a strengths-based, empowerment perspective, with the belief that to do otherwise may inhibit parental change (Houston, 2016, p. 349). The functional-contextual model described by Azar et al. (1998) requires that assessment methods enable parents to demonstrate their strengths with regard to parenting, and the Tuituia assessment framework appears to have a strong emphasis on providing a balanced view of

parents that includes as many strengths as weaknesses (Oranga Tamariki Ministry for Children, 2019).

3.3.7 Comprehensive models vs. focused models

The models fell into two broad groups with regard to the number of characteristics that they covered: those that were comprehensive (eight models, each covering 10-15 characteristics) and those that were more narrowly-focused (three models, each covering 5-6 characteristics). The focused models all included direct assessment of the child, assessment of the parenting characteristics, and assessment of the parent-child relationship (Barnum, 1997; Browne, 1995; Kuehnle et al., 2000). The most comprehensive model was the SAAF model which included 17 of the model characteristics, only omitting the following: explicitly assessing the parent-child relationship and using the assessment process itself to inform intervention (Pizzey et al., 2017). The authors do refer to ‘family and social relationships’ within their analysis model, but stop short of directing assessors to explicitly examine parent-child attachments or relationships. Only the SAAF model and Budd’s (2005) model addressed intervention, with both of them outlining the need to relate the proposed intervention plan to the report findings and measure intervention outcomes (Pizzey et al., 2017). Consideration of the chronosystem was recommended in most models, and many also included parental behaviour over time as a more heavily-weighted factor for the analysis. Given the evidence that prior history of CPS notifications are one of the key factors in predicting subsequent maltreatment, this seems appropriate.

3.3.8 Evidence for predictive validity

No PCA models have been evaluated for their accuracy in predicting subsequent child maltreatment. The only model found to be systematically evaluated was the SAAF model, which was implemented in the United Kingdom (UK) from 2014-2015 (Macdonald et al., 2017). This arose out of the cry for increased trust in professional judgement rather than

actuarial methods, or ‘tick-box’ compliance requirements (Macdonald et al., 2017, p. 8). The SAAF model reflected an attempt to combine predictive data with contextual information within a structured decision-making process. The project was referred to as an ‘embedded investigation’ by the researchers rather than a randomised trial. Overall, the authors concluded that there was ‘no evidence of effectiveness’, but stopped short of claiming that this was ‘evidence of ineffectiveness’ (Macdonald et al., 2017, p. 151). Several important issues were raised through the evaluation process that have implications for social work practice in the field of child protection. Firstly, the authors found that the data available were incomplete, due to idiosyncrasies of the database and data collection system across a range of different areas. Secondly, the authors based their conclusions about the fidelity to and implementation of the SAAF model on data from a low response rate for the second wave of the trial. Social workers who did participate reported that the training was fit for purpose and useful. Finally, the SAAF tool was not used in a consistent manner by the trained social workers, limiting any conclusions regarding its effects in real-world settings. The predictive validity of the SAAF model for subsequent maltreatment or placement decisions was not examined as a part of this evaluation.

Although the SAAF tool appears highly structured and prescriptive compared to other models, as outlined by Pizzey et al (2017), the evidence from the trial suggests that referring to it as a “structured decision-making tool” is inaccurate. Its analysis approach was perceived as too complex and time-consuming, and the authors suggest that a simpler approach would be more acceptable to those being asked to use it (Macdonald et al., 2017, p. 156).

3.4 Strengths and limitations

This review of PCA models for child maltreatment has several strengths and limitations. It is the first review to systematically summarise and examine PCA models in the child welfare context. This provides assessors, lawyers and judges with a resource for informing their

professional work with CPS-involved families. By identifying model strengths and limitations, those following particular models may choose to supplement their approach with components from other models. This review may also be useful for researchers in the field to identify areas to further examine, particularly with regard to the predictive validity of PCA components that are common across most models.

It is possible that models were omitted from the review that fit the selection criteria due to insufficient search terms or relevant publications occurring far down the Google Scholar results pages. However, references to prior models made in later-published articles or chapters were followed up and considered for inclusion. This review also did not examine in detail the tools or specific measures that were recommended within some of the PCA models. For example, Moran and Weinstock (2011) review various tools for the assessment of attachment and parenting styles for family court reports, providing a very useful resource for assessors. This review also identified model characteristics based on what was noted subjectively through summarising models. Other salient model characteristics may have been overlooked through this method. Furthermore, the review stopped short of assigning greater or lesser importance to various characteristics, and instead treated them as equal. Some model characteristics are likely to be more relevant or of greater weighting than others.

3.5 Discussion

There were several key characteristics common across most of the PCA (child maltreatment) models reviewed here, representing an apparent general consensus in the field. Most or all of them recommended the consideration of context and the assessment of: parenting characteristics; parents' histories and prior interventions; the parent-child relationship; and, the child themselves. Most models also described the process of assessment to some degree, such as referring to multi-modal data collection. Beyond these key similarities, the published PCA models varied widely in the extra components for recommendation. One seemingly key

area that was not universal was the linking of intervention recommendations to the analysis findings.

Although processes were described (such as interviews and observations), the specific means by which this should be done were not prescribed (i.e., the methods for assessing parent-child relationships). This presents a challenge for the evaluation of PCA models for child maltreatment: if a model is not replicable to a high degree of fidelity it cannot be assessed for validity in any meaningful way. The implementation and evaluation of the SAAF model highlights the complexity of undertaking evaluative research of such models. Careful planning is required for robust assessment in real-world settings. The feasibility and acceptability of any structured PCA model for busy social workers, who already have preferred methods in place, presents a challenge to the implementation of any new approach. Gaining consistency across social workers' PCAs may not be realistic even following training in a specific model, especially as most tools include 'professional judgments' during the analysis phase.

An alternative approach to evaluating models may be to replicate and extend the work of Budd et al. (2001). Existing PCAs for child maltreatment contexts could be evaluated against a set of criteria, such as those outlined in Table 2, and also in terms of predictive validity, specifically prediction of subsequent maltreatment notifications or entry into state care. This highlights a fundamental flaw of observational studies of this nature – that in most cases, whether the decision was the 'best' one for the child or not is unknowable. Despite this, linking PCA findings and recommendations with future maltreatment or child removal events through a longitudinal study design would provide very useful information about the uses and validity of PCAs.

This review has identified some common components of PCA models in the context of child welfare. Yet evidence is lacking for which of these are the most relevant for identifying current and future harmful parenting. The models varied considerably in terms of content, focus and recommended processes, but because of the lack of evidence there is no way to assess and compare their quality. The question of feasibility and replicability was highlighted by the SAAF trial, but extends to all models. If any of these models were to be evaluated, in their entirety, for potential to accurately predict CPS-involved parents' future parenting practices, they would need to be applied in a systematic and reliable manner across a large number of cases. Given the challenges in undertaking this, and the current state of the research in this field (Macdonald et al., 2017; Ward et al., 2014), it is more useful to systematically evaluate specific components of PCA for their potential to predict subsequent harmful parenting. In this way, a 'better practice' model may be built for PCA in the context of child maltreatment. In the following chapter, specific aspects of PCA and hypothesised relevant constructs are discussed, along with alternative methods for establishing parents' capacity to change.

Chapter 4

Establishing the scope of Parenting Capacity Assessments: Parental psychological functioning, capacity to change, and reflective functioning

Research suggests that the parent-child relationship and associated constructs such as attachment and PRF are more likely to be dysfunctional or impaired in CPS-involved families, and that overall parental capacity to change should also be examined alongside other factors measured in the course of a PCA. The relationship between attachment styles and disorders and harmful parenting is canvassed in this chapter, followed by a discussion on the evidence regarding the intergenerational transmission of trauma. The scope of information gathered during the course of a PCA can include parents' psychological difficulties, personal backgrounds, capacity to change, attachment and reflective functioning. Models of assessing the potential for parents to change in response to intervention are summarised first, followed by a discussion of parental mental health and personal history. Evidence regarding attachment and reflective functioning is then presented, along with a discussion of these constructs' relevance to the assessment of CPS-involved parents. This chapter concludes with a final synthesis of the PCA evidence set out in chapters 3 and 4, and a statement of the research question.

4.1 Parental capacity to change

Estimating a parent's capacity in the present is distinct from their capacity to change in the future (Platt & Riches, 2016a). The former is a parent's 'overall ability to parent a child, across the range of needs the child may present', whereas the latter can be defined as 'the range of attributes, capabilities, motivations, contextual factors etc. that may enable a parent to make changes for the benefit of the children, and to demonstrate that they can address critical difficulties that would otherwise have a severe impact on the child's welfare' (Platt & Riches, 2016a, p. 15). The following section explores some models of behaviour change related to parenting, then describes two explicit models for the assessment of parental capacity to change among CPS-involved parents.

4.1.1 Trans-Theoretical Model of change

Prochaska and DiClemente's Trans-Theoretical Model (TTM) of change is the most well-researched model of behaviour change. It has been studied across a range of populations for purposes that include its original development for smoking cessation and addiction, to other health-related behaviours like exercise and diet (De Menezes, Bedeschi, Dos Santos, & Lopes, 2016; Hötzel, von Brachel, Schlossmacher, & Vocks, 2013; Rios, Herval, Ferreira, & Freire, 2019). Its authors conceptualise the process of change as involving several stages, the first three of which are generally passed through before observable actions towards change occur. These five stages are referred to as: pre-contemplation; contemplation; preparation; action; and, maintenance (Prochaska et al., 1994). People can move in and out of different stages; the process is non-linear and occurs over time. Although the stages of change model is generic, some researchers and practitioners argue strongly for its relevance to child protection and the assessment of parenting capacity (Morrison, 2010). Parents within child protection settings may undergo motivational changes in much the same way that clients receiving mandated treatment for addictions. Ward, Brown and Hyde-Dryden's (2014) research report from the UK describes common responses among parents involved with CPS:

“Many parents, when advised of serious child protection concerns will, at least initially, deny that there is a problem or that their behaviour patterns have an impact on their children; others will outwardly comply with social workers’ requirements, while inwardly remaining disengaged. Some parents with learning disabilities or specific mental health problems may not understand that certain behaviour patterns and adverse parenting practices can place their children at risk of significant harm. However resistance to change can also reflect internal factors such as fear of stigma, shame [and] ambivalence about the benefits of

change and parents' lack of confidence about their capacity to overcome factors that place their children at risk" (Ward et al., 2014, p. 142)

The TTM's acceptability and face validity for social work practitioners is in its favour, as is its potential as a shared taxonomy for behaviour change among practitioners. These arguments are persuasive in a field sorely lacking consistency and confidence in existing frameworks and tools. Yet the use of the TTM in the child protection field has not been universally supported, although it has been implemented as a framework for social workers' parenting capacity assessments, as well as with intervention work with families (Morrison, 2010; Ward et al., 2014). The model overlooks the social context in which behaviour change occurs; for most parents involved with child protection services, the barriers to change are not merely internal nor are they individual. The systems in which the parent and child are embedded often contain external barriers that make changes difficult and unlikely to be sustained. Platt and Riches (2016b) describe an example in which a parent may have scheduling conflicts between visiting their child in care and going to work. For some parents, going to work, particularly if employment is scarce or precarious, may take priority, even though they want to improve their relationship with their child and their chances of attaining custody. Losing work may mean losing a livelihood or the ability to pay rent for the house in which their child would live – these types of external stressors are not accounted for in the TTM, and the focus is on the individual's internal process.

Ward et al. (2014) point out that the predictive validity of the model's associated readiness-to-change scales has yet to be proven in the field of child protection; there is a difference between a parent's self-reported readiness to change as measured within a therapeutic relationship, and their *likelihood* to change parenting behaviours following the

outcome of a parenting assessment. The latter situation suffers from the same flaw as all self-report measures used in court proceedings: parents are motivated to answer with a self-serving bias.

The complexity of parent problems and behaviours in the child welfare context go well beyond mere motivation or readiness to change on the part of the parent. Relapses incur harm towards children as well as the adults they depend upon. There is also a reciprocal interaction between the parent's attitudes and actions across multiple problems, some of which may change and others that do not, and the day-to-day experiences of the child. For example, a parent may reduce their drinking in response to supports but continue to leave their child at home alone due to other stressors – thus there is a significant behaviour change on the part of the parent, but they may continue to provide inadequate care for their child. In the change process for chronic behaviours, relapse is also more likely than remission (Prochaska & Prochaska, 2002, cited in Ward et al., 2014). This is discouraging for all psychological treatments, but even more so in the field of child protection. The consequences of relapse include adverse experiences and outcomes for vulnerable children, thus creating a tension between intrinsically-motivated processes that may occur naturally and the urgency of the child's experiences of day-to-day harm.

4.1.2 Adaptations to the Trans-Theoretical Model of change

Several studies have built on the stages of change model and extended it for use with families and women at risk. The TTM of change assumes an internal psychological process, and that the person wanting change has both the resources and the opportunity to implement the stages of change. This assumption was addressed by Humphreys, Thiara and Skamballis (2011) in a study of readiness to change and the relationships between mothers and children following domestic abuse. Their adapted model included other factors such as the structures required for change to come about (access to agency support, for example) and placing the mother-

child relationship, and the voice of the child or children at the centre of the change process. In this study, the tension between the mother's needs and the child's needs was targeted specifically through resolving the relationship – a relevant factor in the particular circumstances of the women in the study, but not normally included in readiness-to-change constructs (Humphreys et al., 2011).

Hegarty et al. (2008) evaluated the alternative Psychosocial Readiness Model, which also builds on the TTM, in a brief counselling intervention with women victims of family violence. The model takes a wider contextual stance than that of the TTM by including characteristics of the supporting professionals, and other situational factors impacting on change processes. It also widened the internal factors to include other relevant knowledge or beliefs such as recognising abuse, and levels of self-efficacy. The authors conclude that both internal and external factors act as catalysts or impediments to change in the population studied, but did not critically evaluate its predictive validity in whether substantial changes (such as leaving an abusive partner) were related to scores or estimates based on the Psychosocial Readiness Model (Hegarty et al., 2008).

Neither of these further adaptations have been applied to behaviour change among a population of maltreating parents, and their predictive validity has not been established. Littell and Girvin (2005) explored the predictive validity of a two-dimensional model of change-readiness among parents or caregivers of children who had been reported to CPS and who were receiving home visitation. They separated the model into 'problem recognition' and 'intention to change', and found a small relationship between scores on those dimensions and subsequent notifications of harm within a year (Littell & Girvin, 2005). The authors concluded that overall readiness-to-change measures should not be used to make treatment decisions, but that it should be placed alongside other relevant measures within assessment and intervention with parents who have CPS involvement. They state '...it should not be

assumed that initial problem recognition, intentions to change, or apparent readiness for change determine who is most likely to benefit from treatment' (Littell & Girvin, 2005, p. 76).

4.1.3 Intervention-based models of assessing parents' potential to change

4.1.3.1 Parents Under Pressure model of capacity to change

Harnett and Dawe (2008) have devised a procedure to assess child abuse potential in parents involved with child protection services. The underlying principle is that a behaviour sample is the most valid predictive tool for future behaviour, and so short-term response to intervention is likely to be a predictor of longer-term response to intervention. They have therefore designed a short-term parent intervention, Parents Under Pressure (PUP), that allows parents to set and achieve goals within a specified timeframe. Pre- and post-intervention data was gathered using a range of measures on parents who had been referred by child protection services. While the number of participants was low (10 families), eight of them showed clinically significant improvement on at least one measure, and half of them showed changes on multiple domains measured. The authors argue that their results demonstrate that the majority of high-risk parents do have some capacity for change, but there remain a minority of high-risk families who do not respond to intervention – even among the families willing to participate in a research study. This study included the heavy reliance on parental self-report which may be biased, particularly in this population (Costello & McNeil, 2014). One challenge to the fundamental assumption of this approach is that parents are able to demonstrate changes for a short time, but when the intervention is removed behaviour reverts back to pre-intervention levels. This is of course a criticism valid for many parenting programmes, particularly those working with families with complex problems- (Harnett, 2007).

4.7.3.2 C-Change Capacity to Change assessment process

Platt and Riches (2016b) have developed a manualised assessment of parental capacity to change, resting on principles similar to Harnett's (2007) approach. Intended for use with cases of child abuse and neglect, their model assumes the completion of a robust PCA as part of its process. From this PCA, findings regarding potential barriers to change inform the interim intervention goals. The individualised intervention is then implemented based on these goals, and parents' 'observed change' is weighed up along with background information to inform a description of parental capacity to change (Platt & Riches, 2016b, p. 15). Five principles underpin this process. The first and the third relate to specificity in application: capacity to change should be assessed in relation to individually-defined behaviours which are related to the problem, and all caregivers' capacities to change should be examined separately from one another. As mentioned, the second principle states that the estimation of capacity to change is only possible within existing PCA processes. Capacity to change is made up of two dimensions: an exploration of the barriers and facilitators of change, and the actual changes observed during intervention. The final principle pertains to developmental timeframes: the assessor must consider whether parents have the capacity to change within a time short enough to meet the needs of the child (Platt & Riches, 2016b). The 'C-Change Capacity to Change' manualised assessment process encompasses the need for high-quality PCAs and individualised intervention plans, and outlines a logical, objective method for estimating the likelihood of future behaviour change among CPS-involved parents. This model appears to fill a gap in the literature but has yet to be evaluated for its predictive validity.

4.2 Psychological characteristics of CPS-involved parents: assessing mental health, substance use, self-efficacy and mental monitoring

4.2.1 Substance use

Substance use is a well-known risk factor for harmful parenting, and on its own can constitute harmful or neglectful parenting. It is therefore taken seriously by social workers when investigating allegations of maltreatment (Lloyd, Akin, & Brook, 2017; Lloyd & Brook, 2019). In examining the relationship between maternal mental health disorders, substance use and CPS reports, one study found that the rate of CPS notifications among women with both a mental health disorder and substance use was more than twice that of CPS reports for women with a mental health disorder only (Hammond et al., 2017). Conversely, another study examining child wellbeing among families with CPS involvement found that the children of parents who used substances were no worse off than the children whose parents refrained (Orsi, Brown, Knight, & Shillington, 2018). Although estimates vary, between one third and four-fifths of families involved with CPS include a parent with substance use problems (Freisthler, Kepple, Wolf, Curry, & Gregoire, 2017). The magnitude of substance use as a key contributing factor to child maltreatment is significant, but the exact role it plays in adding to harmful parenting depends on the nature, extent and impact of parental substance use. It is therefore essential to assess substance use in PCA as a potential confounding factor: for some parents, substance use may be the primary barrier to adequate parenting and once treated, they are able to parent well. Identifying parents' levels of substance use ensures that this factor, which is potentially more predictive of subsequent notifications than other psychological constructs of interest, is appropriately considered as part of PCA.

4.2.2 Mood problems in parents

Parental depression has been found to be associated with poor parenting outcomes, and among CPS-involved parents rates of mood problems are higher than in the general

population (Casanueva, Cross, Ringeisen, & Christ, 2011). Adults who were themselves maltreated as children show higher rates of anxiety and depression (Fusco, 2015; Lauterbach & Armour, 2016), and parental depression and stress have been shown to predict harsh discipline among parents at risk for child maltreatment (Venta et al., 2016). Mood problems and high levels of stress are also potentially related to other constructs of interest such as reflective functioning, attachment and self-efficacy (Krink, Muehlhan, Luyten, Romer, & Ramsauer, 2018; Michl-Petzing, Handley, Sturge-Apple, Cicchetti, & Toth, 2019; Rosenblum, McDonough, Sameroff, & Muzik, 2008). Symptoms of mood problems are dynamic factors rather than static; mood changes over time depending on situational and internal factors, whereas other psychological characteristics such as attachment style remain stable over time. In PCA, both static and dynamic factors must be considered as potentially influencing the quality of caregiving. In one study of child maltreatment and depression, the 12-month prevalence of depression among CPS-involved mothers was 25%, and was associated with intimate partner violence and poor health (Casanueva et al., 2011). While clinical-level depression and anxiety disorders (i.e. diagnosable using a classification system) undoubtedly undermine parenting, the exact manner in which they account for or contribute to chronic child maltreatment is not known. Depression and anxiety may be an outcome of situational stressors that are also associated with child welfare involvement (e.g. poverty or family conflict), as well as a cause of poor parenting (e.g. when a parent is unresponsive). Accordingly, mood problems should be measured in the course of a PCA.

4.2.3 Parenting self-efficacy

Parents' sense of self-efficacy is related to other positive parenting behaviours, and may be associated with capacity to change among CPS-involved parents. Jones and Prinz (2005) conducted a comprehensive review of this construct, finding evidence for its association with depression, stress and parental coping. Self-efficacy has been found to be a mediating factor

for treatment outcomes and other parenting functions such as responding to child misbehaviour (Jones & Prinz, 2005). Self-efficacy has also been highlighted as a feature of parental capacity to change for PCA in the context of child maltreatment (Platt & Riches, 2016a). Thus, parental self-efficacy should be considered as a psychological characteristic that may predict subsequent behaviour.

4.2.4 Parental sense of responsibility for and awareness of the child

One further construct was hypothesised to be related to parenting capacity. This is the quality of awareness of one's child, and sense of responsibility for their wellbeing that can be thought of as 'parental vigilance'. From the moment a baby is born, her parents become responsible for her moment-to-moment care; checking on her needs, thinking about how best to meet them and ensuring that she is well and comfortable. In most parents this sense of responsibility is almost immediate and intense, with a shift in focus and awareness that is recognisable to others around the new parents (and, indeed, is sometimes joked about by friends and family). Neurological changes in structure and functioning have been observed in new human and animal mothers (Kinsley & Meyer, 2010), and are thought to be biological adaptations to the demands of caring for another, wholly dependent, infant. Given what we know about the structural and functional impact of child abuse and neglect on neurodevelopment (Teicher & Samson, 2016), it follows that parents who have themselves been maltreated may also be disadvantaged during this developmental shift that occurs with becoming a parent.

Distinct from child-in-mind-mindedness or reflective functioning (Demers, Bernier, Tarabulsky, & Provost, 2010), this 'parental vigilance' refers to the more basic role of parenting in terms of 'taking care' of another person. It is conceptualised as being a constant awareness of where and with whom my child is. This does not mean a parent is frequently thinking about or focusing on their child; rather, it is the continuous sense of responsibility

felt by parents whether their child is physically present or not. In most parents this quality would be well-developed, in that a parent's knowledge of their child's physical whereabouts and overall wellbeing is constant, and adapted to developmental stage of that child and the parent's particular role at the time (i.e. whether it is my responsibility to look after my child, or another caregiver's). For example, the parent of an infant is aware of the exact location of their child at all times, even within the house, while they are in the parent's care. The parent of a school-aged child may not know the exact location in the home or school, but they would know and trust the people who are taking care of their child at all times. Parents of adolescents may be less vigilant if they know their teen is at school, but more aware when they are out with friends late in the evening. Both parents, of a baby or an older child, would feel a sense of responsibility for both the physical and emotional wellbeing of that child – whether they are ill or well, and whether they are content or distressed. In parents where quality is poorly-developed, parents may only have awareness of these things intermittently. Some CPS-involved parents have been observed to not know where their children are or who is caring for them, displaying a marked absence of the quality described above. Literature describing this phenomenon was not found, and research has not yielded clear indicators of caregiver characteristics associated specifically with neglect (Simmel, Merritt, Kim, & Kim, 2016). One study examined maternal communication styles and PTSD symptoms with 105 neglected and non-neglected pre-schoolers (Milot, St-Laurent, Éthier, & Provost, 2010). Neglected pre-schoolers displayed more PTSD symptoms, including dissociation, and mother-child interactions were of poorer quality among dyads with higher trauma ratings. It is possible that among parents with lower awareness of, and sense of responsibility for their child, there are higher rates of dissociation – but this would have to be examined further in future studies. For this study, a measure related to a parent's sense of responsibility for and awareness of their child was relevant to the research question.

4.3 The role of attachment in PCA

Most models of PCA include at the very least a consideration of the parent-child relationship, and in many cases the model specifies that the parent-child attachment be assessed. The attachment bond is considered a foundational component of parenting, and its function of providing a “secure base and safe haven” supports healthy psychological development. Attachment behaviours are observable in infants aged from 7-9 months on, and are elicited under stress. These include proximity behaviours, distress (or otherwise) at separation and comfort seeking from the attachment figure (John et al., 2019). Attachment is specific to a relationship rather than a person, and is thought to be foundational to a person’s interpersonal style and relational functioning throughout development (Bowlby, 1982).

However, the assessment of attachment in the course of PCA is only useful insofar as it predicts possible parenting difficulties. Furthermore, most models reviewed in the previous chapter did not specify whether to assess a child’s attachment to her parent, or a parent’s attachment style towards a particular child. Many models referred to ‘interactional patterns’ between caregivers and children, perhaps best thought of as the parent-child attachment system, which may not reflect attachment status in the traditional sense (e.g. Skowron et al., 2010). Attachment security or style, attachment strength and attachment disorders must also be delineated, and evaluated in terms of relevance and application to PCAs conducted in the field of child protection.

4.3.1 Parental attachment styles, strength and associations with harmful parenting

The original conceptualisation of attachment as categorical in nature has persisted, despite evidence suggesting that considering key aspects as dimensional provides a logical fit for infant behaviour during the Strange Situation (Ainsworth, 1978; Chris Fraley & Spieker, 2003). Thus considering the *strength* of parents’ attachment security or insecurity, or the intensity of the bond between parents and children, may also be relevant in assessing

parenting capacity. Yet categorical classification systems, considered ‘gold standard’, have prevailed in much of the research examining relationships between attachment and harmful parenting. Parents’ attachment representations have been linked with other parenting behaviours, particularly insensitive or harmful parenting, but these are by no means the only constructs which impact on child’s security, development or functioning (Borelli, Goshin, Joestl, Clark, & Byrne, 2010; Crowell & Feldman, 1988; Granqvist et al., 2017; Rutter, 1995).

Parenting interactions and attachment styles have been examined in groups of clinical and non-clinical mothers, using behaviour during play tasks and the Adult Attachment Interview (AAI; George, Kaplan, & Main, 1985). Differences were found in mothers’ behaviour associated with attachment status: mothers classified as secure were more supportive and helpful during the play interaction than mothers classified as preoccupied or detached (Crowell & Feldman, 1988). Incarcerated mothers, followed from pregnancy onwards for an average of eight months, have been found to have high rates of insecure attachment (Borelli et al., 2010). Mothers in this study with ‘preoccupied’ styles in particular were found to have more depressive symptoms, lower perceived social supports and lower ratings of parenting competence. A more recent study has examined parents’ attachment styles among maltreating and non-maltreating mothers, and tested physiological stress indicators during a computerised ‘comfort paradigm’ (Reijman et al., 2016). Maltreating mothers differed significantly from non-maltreating mothers, with higher rates of unresolved status on the AAI, but no differences were found between the groups for the stress indicator. Attachment representations in parents are associated with parenting behaviours, but should be considered merely indicative alongside other factors that also affect trajectories of harmful or benevolent parenting (Cicchetti, Toth, & Lynch, 2013; Rutter, 1995).

4.3.2 Attachment disorders in children and child maltreatment

There are two formal attachment disorders outlined in the *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* (DSM-5), both of which are only diagnosed among children with a history of maltreatment or severe social adversity (such as early institutional care) (American Psychiatric Association, 2013). In previous DSM editions, both Disinhibited Social Engagement Disorder (DSED) and Reactive Attachment Disorder (RAD) were classified under one diagnosis of RAD with two sub-types, but these are now recognised as the discrete disorders. One study found that the prevalence of diagnosed RAD in the general population was 0.8%, diagnosed in 13 of the 1,600 children studied (Pritchett, Pritchett, Marshall, Davidson, & Minnis, 2013). More recently, study examining DSED among children adopted from OOHC in the UK has estimated the prevalence at 29 (49%) of 60 children. Much lower rates of DSED were found in the same study among children with externalising behaviour and matched children with low levels of risk, at 4% and 6% respectively (Kay, Green, & Sharma, 2016). In a Scottish study of 100 children examining RAD symptoms in all children coming into OOHC over a period of 12 months, 5% were found to have RAD. Attachment disorders may be associated with experiencing maltreatment and being in OOHC, but some disagreement exists regarding the relevance and utility of their diagnosis for children. John et al. (2019) argue that complex trauma and its associated difficulties account for a significant proportion of the difficulties experienced by children in OOHC. They posit that it is more appropriate to undertake a developmentally-informed case conceptualisation, that guides individualised treatment, than to classify a child with a label implying long-term, resistant-to-treatment difficulties (John et al., 2019). No published estimates were found regarding the prevalence of attachment disorders in children whose parents were involved with CPS, but having an attachment disorder does not necessarily indicate whether or not subsequent parenting will be harmful. However, given the significant

impairment associated with the extreme nature of the disorders, parenting a child with an attachment disorder is more challenging than parenting a typically-developing child.

Furthermore, those parents whose children have attachment disorders are more likely, due to the aetiology of the disorders, to be ill-equipped to provide consistent, warm and appropriate responses over the long-term. Thus, the presence of an attachment disorder should be considered as significant in the analysis phase of PCA.

4.3.3 Methods for assessing attachment in PCA

Most PCA models provide little guidance on how attachment should be assessed effectively and accurately within child protection proceedings (Schmidt et al., 2007). Schmidt et al. canvassed the available, attachment-based parenting tools for the assessment of parent-child relationships in PCA, with a focus on parent behaviour and attachment style (2007). These included the Working Model of the Child Interview (WMCI), the Crowell procedure and the Atypical Maternal Behaviour Instrument for Assessment and Classification (AMBIANCE; Crowell & Feldman, 1988; Goldberg, Benoit, Blokland, & Madigan, 2003; Zeanah & Benoit, 1995). The AAI and the Strange Situation were acknowledged as gold standard for research purposes but impractical for clinical uses. The authors recommended that clinicians conducting PCA be: familiar with the research on attachment and child protection; experienced in observing parent-child interactions; and, competent to interpret behaviours and interactions with reference to the research. To this end, at least two direct observations were recommended, lasting over an hour. At least one of these should be conducted in the home setting, and ideally some stress should be introduced, such as a reunion or separation procedure, in order to elicit attachment-related responses in the parent and child. In addition to unstructured direct observation, the assessment should include a (preferably videotaped) interview using a structured, codeable protocol such as the WMCI. In this way, both overt behaviours *and* the parent's internal representations about the child are captured, providing a

comprehensive set of information that, when placed alongside contextual and historical information, allows for sound clinical interpretation (Schmidt et al., 2007).

There is an ongoing discussion among world-leading attachment researchers of attachment measurement and clinical applications, with a particular focus on the appropriate use of measures in child protection and family court proceedings (e.g. Granqvist et al., 2017; Ijzendoorn, Bakermans, Steele, & Granqvist, 2018; Spieker & Crittenden, 2018; Van Ijzendoorn, Steele, & Granqvist, 2018). Concern is growing that the attachment literature has been misinterpreted by some clinicians and policy makers, putting vulnerable children and families at undue risk. Chief among these misinterpretations is that displaying disorganised attachment behaviours indicates maltreatment, and that attachment organisation is useful and reliable at an individual, clinical level.

4.3.4 Disorganised attachment: red flag or red herring?

Although the “disoriented/disorganised” (“D”) classification on the Strange Situation Procedure (SSP) has been strongly associated with parental psychopathology, its appropriateness for application to individual cases has been questioned. Specifically, the implications under question are: that the “D” classification is definitive; that it can be used as a reliable indicator of maltreatment; that it predicts pathology; and that it is a stable construct throughout development. While there is evidence, to some extent, supporting all these implications, the widely-held and strongly stated consensus is that these assumptions are inaccurate (Granqvist et al., 2017). Thus, using the “D” classification as a diagnosis is inappropriate, even more so when it is used as evidence supporting decisions about child placements. The authors draw a distinction between the “D” classification, which is relationship-specific, and the two attachment disorders in the DSM and International Classification of diseases (ICD) classification systems (American Psychiatric Association, 2013; World Health Organization, 2018). The latter occur across settings in the context of

severe neglect, with multiple adults, significantly impairing a child's capacity to form close relationships. Instead of using attachment classifications in evidence for decision-making in child welfare, the authors argue that the appropriate use of attachment measures is to inform interventions needed to enhance the child's relational environment (Granqvist et al., 2017).

This strong and united argument did not canvass the Dynamic-Maturational Model of Attachment (DMM), which is designed for individualised, clinical application and is therefore arguably appropriate for use in child welfare PCA (Spieker & Crittenden, 2018). The DMM differs from traditional attachment coding schema in several ways. It codes infant behaviour according to its *function* within the interpersonal relationship, rather than just the observable behaviour independent from context. Both mother and infant behaviours are coded rather than just the infant's (i.e. attachment occurs within a dyadic relationship that contains two people). Finally, the DMM views the behaviour typically coded as 'disorganised' as adaptive for the child's environment, in that it increases the likelihood of receiving a protective parental response (Spieker & Crittenden, 2018, p. 628). Constructing attachment as fluid rather than fixed allows for parent and infant change, and the focus is on the nature of the relationship alongside development. The higher number of categories in the DMM allows for more sensitivity and accurate intervention planning. Its authors argue that this makes the model much more appropriate for court and welfare settings when used alongside other measures (Spieker & Crittenden, 2018).

This position is strongly refuted by others in the field, with the DMM being seen as insufficiently sensitive and specific to identify prior maltreatment with certainty, rendering it inappropriate for high-stakes court settings where accuracy is of vital importance (Ijzendoorn et al., 2018). The primary basis for this position rests in the low inter-rater reliability scores for the DMM, using the modelling of probabilities to demonstrate that 'correct' diagnosis is likely in 76% of cases. While this may be broadly acceptable for some uses, the incorrect

diagnosis may provide the basis for erroneous decisions made for one in four children.

Having an insecure or even disorganised attachment style is not determinative of maltreatment status, nor is it rare or considered ‘disordered’ per se, in that some infants who grow up in low-risk, supportive families will display disorganised patterns (Granqvist et al., 2016; Rutter, 1995). Therefore unless the DMM yields reliable (‘beyond a reasonable doubt’) retrospective predictions of parental maltreatment or psychopathology, it is arguably unsuitable for court settings (Ijzendoorn et al., 2018, p. 644).

In summary, attachment classifications are as yet insufficiently specific and sensitive for use in PCA within the context of child maltreatment. Some models are promising for clinical use and intervention planning, and the research into robust and replicable measures is ongoing. In the meantime, firm conclusions cannot be drawn about a child’s future safety through the use of currently-available attachment assessments, although attachment appears to be a relevant and important consideration for the assessment of parenting capacity (Granqvist et al., 2017; Van Ijzendoorn et al., 2018)

4.4 Intergenerational transmission of trauma

Parents who were maltreated as children may be at increased risk for maltreating their own children; among parents who are involved with CPS there is a much higher rate of personal maltreatment histories. Systematic reviews examining this association have found that many previous research studies were methodologically-flawed (Madigan et al., 2019; Thornberry, Knight, & Lovegrove, 2012). A general consensus has emerged, and the evidence available suggests a relationship between being maltreated and engaging in maltreatment. Most of the 47 studies in the first systematic review relied on retrospective self-report data, limiting the evidence for a causal relationship (Thornberry et al., 2012). While there appears to be increased *likelihood* of maltreatment among parents who were maltreated, the majority of parents who were maltreated do not go on to subsequently maltreat their own children

(Fusco, 2015). Among the 142 studies included in the most recent review there was an overall effect size of 0.45 for the intergenerational cycle of maltreatment (95% confidence interval [CI] = 0.37-0.54). Methodological quality moderated the effect size for physical abuse – as rigor increased, the effect size decreased (Madigan et al., 2019). The role of mediating and moderating factors in this intergenerational cycle have been examined, and three potential factors include attachment, emotional regulation and RF.

4.5 Emotional regulation & parenting

The ability of parents to regulate their own emotions is critical to healthy infant and child development (Rutherford, Wallace, Laurent, & Mayes, 2015). Infants and young children learn how to regulate their own emotions from their parents in a variety of ways, and evidence supports an association between parental and child emotional regulation. Mothers who suppress their emotions are likely to have children using the same strategy; teenage girls' ability to cope with frustration is associated with their mothers' abilities; and children of depressed mothers were more passive than children of mothers who were not depressed (Bariola et al., 2012; Daughters, Gorka, Rutherford & Mayes, 2014; Silk, Shaw, Skuban, Oland and Kovacs, 2006; cited in Rutherford et al., 2015). Difficulty in regulating emotions is also one of the key features of Borderline Personality Disorder (BPD; Gratz, Rosenthal, Tull, Lejuez, & Gunderson, 2006). Mothers with BPD were compared to mothers without BPD when engaging with their children in a small study, and key differences were noted in both mothers and infants. The mothers with BPD were lower in sensitivity and less able to structure the activities, and the infants themselves were less responsive to their mothers' interactional overtures (Newman, Stevenson, Bergman, & Boyce, 2007). A recent meta-analysis examined the relationship between emotional regulation and maltreatment in families. Parents who emotionally maltreated their children reported greater rates of affective instability and poorer strategies to regulate (Lavi et al., 2019). The link between child

maltreatment and parental difficulties in emotional regulation is logical; parenting increases stress for parents, and those who struggle to regulate are more likely to use unhelpful coping strategies such as anger or hostility, or withdrawal. In this way, emotional regulation ability may be a mediating factor for child abuse and neglect (Lavi et al., 2019).

4.6 Reflective functioning

RF is a meta-cognitive phenomenon, connecting emotion and cognition. It refers to the ability to understand and interpret one's own and others' mental and emotional states, and link these to behaviour (Fonagy & Luyten, 2009; Luyten, Nijssens, Fonagy, & Mayes, 2017). It is considered 'a crucial human capacity that is intrinsic to affect regulation and productive social relationships' (Slade, Grienenberger, Bernbach, Levy, & Locker, 2005, p. 269). The role of RF in adults has been explored through several studies, in part due to its possible role in underpinning a range of psychiatric disorders to do with personality, identity and affect modulation (Antonsen, Johansen, Rø, Kvarstein, & Wilberg, 2015). RF, referred to as 'mentalization' in many studies, was originally measured through the AAI, by coding narratives about adults' relationships with their own parents (Fonagy & Luyten, 2009). Research on adult psychopathology using the AAI has highlighted RF as a mediating variable between childhood maltreatment and adult psychopathology (Chiesa & Fonagy, 2014). Furthermore, parents' RF scores have been shown to predict their children's RF and attachment security (Ensink et al., 2019; Rosso & Airaldi, 2016). Thus, leading scholars in the psychodynamic field consider RF to be central and essential to interpersonal human relationships. The following section (4.6.1) describes the theoretical basis for parental RF and its links to responsive caregiving, and outlines the empirical evidence supporting its relevance to intergenerational cycles of maltreatment.

4.6.1 Parental reflective functioning

Earlier in this chapter I outlined the parenting characteristics that facilitate attachment development and security vs. insecurity (4.2). Arietta Slade's construction of the Parent Development Interview (PDI) arose from Fonagy's work in adult attachment and RF (Slade, Grienberger, et al., 2005). Scholars in the field have posited that RF is an essential component of parent-child relationships, underlying Fonagy's theory of reflective parenting. To provide sufficiently sensitive care to facilitate normal attachment development, a parent must be able to reflect on their child's thoughts and feelings. Human society is constructed through social relationships; people have developed a 'representational system' of others' thoughts and motivations that enable them to interact appropriately and constructively. This facility of RF goes beyond interpreting the behaviour and communication of others in the moment, and consists of a person's internal imagined mind of themselves and others. Just as other qualities and abilities vary between individuals, so does RF, with some people displaying excellent insight into others' mental and emotional states and others being limited in this regard. Integrating both cognitive and affective aspects of understanding others, RF is claimed to be similar to 'meta-cognitive monitoring'; its application is flexible and dynamic, and includes observing and analysing one's own thoughts about self and others (Main, 2000; Slade, Grienberger, et al., 2005). '... It is the mother's observations of the moment to moment changes in the child's mental state, and her representation of these first in gesture and action, and later in words and play, that is at the heart of sensitive caregiving, and is crucial to the child's ultimately developing mentalizing capacities of his own' (Slade et al., 2005, p. 271).

Human capacity for reflective functioning develops in infancy through early childhood as a by-product of their attachment development. Therefore, parents' capacity to understand their children's minds and empathize with their children's emotions, is primarily

acquired when they were themselves young children. Caregivers' moderated 're-presentations' of infant experiences allow the child to internalise and understand their experiences through sensitive interactions accumulating over time. In this way, the recognition and understanding of emotion is something that is acquired rather than intrinsic to humans, and this 'affect mirroring' in primary attachment relationships provides the foundation upon which emotional regulation develops (Slade, Grienemberger, et al., 2005, p. 271). Of course, some caregivers are more sensitively attuned to their infant's mental state than others, and sometimes mirroring can be too real, frightening or unpredictable. As Fonagy and his colleagues write, 'the child's mental state must be represented sufficiently clearly and accurately for the child to recognise it, yet sufficiently playfully for the child not to be overwhelmed by its realness...' (Fonagy et al., 2002, pp. 266-267, cited in Slade, Grienemberger, et al., 2005, p. 272).

RF in relation to parents' own children is key to the intergenerational transmission of attachment styles, and trauma, between parents and children (Grienemberger, Bernbach, Levy, Slade, & Locker, 2005; Huth-Bocks et al., 2014; Kelly, Slade, & Grienemberger, 2005; Schechter et al., 2005, 2008; Slade, Grienemberger, et al., 2005). Parents' behavioural and emotional responses to infants are mediated by their representations of their infant's mental state, suggesting that infants whose parents are better able to appropriately interpret infant cues show more secure behaviour. Conversely, parents whose RF is poor or impaired are more likely to interact with their children in ways that are unpredictable or frightening. It has been suggested that parental history of unresolved trauma undermines RF and increases frightening behaviour (Kelly et al., 2005), consequently increasing the rates of disorganised and/or insecure patterns of infant attachment. Studies exploring parental RF suggest a complex interaction, however, between trauma, sensitive parenting, emotional regulation and reflective functioning.

In order to investigate the relationship between emotional regulation and mentalization, parental RF, distress tolerance and physiological arousal were measured among 59 mothers from the community (Rutherford et al., 2015). Distress tolerance was measured two ways, with both a crying baby simulator and a non-interpersonally-related frustration task. Mothers with low parental RF showed less tolerance of distress that was related to interpersonal frustration, and higher levels of physiological arousal. The authors hypothesised that increased stress responses may interfere with mothers' abilities to mentalise, but only when exposed to interpersonal distress (Rutherford et al., 2015). Infant attachment responses are elicited when they are fearful or stressed, and among mothers with low RF stress may rise in response – which in turn undermines their ability to provide the security and comfort their infant is seeking.

This ability to engage RF when under stress may be related to unresolved trauma. In a study exploring mothers' RF regarding trauma ($N = 57$) alongside infant attachment status (Berthelot et al., 2015), variance in infant attachment organisation was partly accounted for by two variables: unresolved trauma on the AAI and low trauma-related RF. Berthelot et al. (2015) concluded that it is mentalization ability regarding trauma that predicts attachment organisation, rather than mentalization ability overall. The authors posit that mothers with unresolved trauma may have momentary lapses in regulation when under stress, creating an unpredictable relational environment for the infant who is then not able to develop an organised and adaptive attachment response system (Berthelot et al., 2015).

An earlier study explored attachment representations, parental RF and Post-traumatic Stress Disorder (PTSD) symptoms among 41 mothers attending a clinic for families at high risk for abuse, neglect and violence (Schechter et al., 2005). Overall, parental RF scores among the participants were low, and lower parental RF scores were associated with insecure attachment representations. However, having low parental RF was not necessarily related to

having increased PTSD symptoms – an unexpected finding due to prior studies (at the time) linking RF regarding trauma to present-day functioning (Schechter et al., 2005). Impaired RF may be an adaptive response when survival is threatened in order to free up attention for immediate needs (Schechter et al., 2005), but the evidence presented in the study was insufficient to show the ways in which parental RF, trauma and attachment are related.

Demographic factors and parenting negativity have also been examined as potential mediators of RF and attachment, along with severity of childhood maltreatment and current PTSD symptoms (Stacks et al., 2014). Similarly to Schechter et al.'s 2005 study, PTSD and maltreatment history were *not* found to be associated with parental RF in this high-quality study. Higher parental RF was associated with increased parenting sensitivity and attachment security, and these were all associated with increased demographic risk. PTSD and depression symptoms were associated with having a history of childhood maltreatment, as expected – but these did not relate to parental RF. This was a larger study with a more heterogeneous sample, and suggests that parental RF plays an important role in safe and sensitive parenting, but that demographic risks are more closely related to RF in parents than maltreatment history or parental mental health. The study's authors acknowledged the possibility that there are weaker associations between parental RF and parenting than previously thought, especially among a clinical population. (Pajulo et al., 2012; Stacks et al., 2014).

The studies discussed above have explored associations between parental RF and other parenting characteristics and behaviours among mothers. Fathers' RF was examined among a sample of 79 fathers, including half with co-morbid substance abuse and violence, and half without (Stover & Kiselica, 2014). Fathers with less formal education and more substance use had lower parental RF, but parental RF was less predictive of parenting behaviours in this study than has been found among mothers. Parenting behaviours were

measured through self-report only, so this finding should be treated with caution. The authors conclude that ‘studies that examine RF in relation to non-self-report measures of parenting are needed because these measures are subject to reporting bias and social desirability’ (Stover & Kiselica, 2014, p. 458). Despite this limitation, this study’s findings are broadly consistent with the two prior studies showing no clear association between mental health, trauma and parental RF (Stacks et al., 2014; Schechter et al., 2005).

In summary, knowledge regarding the relationships between parental RF, trauma, attachment and parenting quality is still emerging. The evidence to date suggests that mothers’ RF is associated with infant attachment, distress tolerance and unresolved trauma. Fathers’ RF appears less salient to parenting behaviours, but still shows expected patterns with regard to psychopathology. Yet among mothers, post-traumatic stress symptoms and trauma severity appear to be unrelated to parental RF, a counter-intuitive finding that, according to Schechter et al. ‘suggest that maternal mental representations may well be viewed through a complex, multi-layered psychological ‘lens’...darkened by affective memories of adverse experiences from which the parent’s attachments are unable to protect them, and lightened by reparative, regulating attachment experiences as marked by reflective functioning that likely supports resilience to adversity’ (2005, p. 328). This interpretation of the findings, in framing parental RF as both a cause and a consequence of adversity and trauma symptom severity, sheds little light on the construct’s association with safe or harmful parenting, and the intergenerational transmission of trauma. Questions remain regarding whether child maltreatment or unresolved trauma is associated with lower parental RF, and whether parental RF predicts parenting behaviours over time among high-risk parents.

4.7 The validity of PCA conducted in child maltreatment

Access to one’s child is a strong imperative for parents to cooperatively engage with PCA processes. Most parents are motivated to impress the assessor and may alter responses and

behaviours (either unconsciously or consciously) accordingly, confounding the assessment process. Yet in many PCAs, parents are the primary source of information upon which decisions about child welfare are made. Thus, as highlighted by Schmidt and colleagues: ‘...These distortions and inaccuracies in the parents’ self-report can make the usual clinical interviews and psychological tests of limited value and misleading. That is, abusive parents cannot be counted on to accurately describe the quality of their parent-child relationship(s) or their own risk behaviours’ (Schmidt et al., 2007, p. 248). Furthermore, psychometric assessments commonly used to examine constructs related to parenting appear to be invalid when used for PCA, likely due to self-serving response biases (Carr et al., 2005). Carr et al. argue that the use of IQ assessment for PCA is appropriate given the standardised approach and the impossibility of ‘faking good’, and that this standardised assessment approach could be extended to parenting-related skills that would provide relevant, valid information with processes that are replicable (Carr et al., 2005, p. 195). However, standardised assessments can be biased and reflect deeply-embedded cultural norms that can disadvantage minority groups. Furthermore, the conceptualisation of parenting as something that occurs from one or two adults in a child’s life is not appropriate for all cultures – fundamentally calling into question mainstream PCA practices for indigenous or minority populations (Choate & Lindstrom, 2017; Choate & McKenzie, 2015).

4.7.1 Evaluation studies of PCA reports

Two previous studies have reviewed the quality of PCAs conducted in court and child welfare settings. Budd et al. (2001) examined 190 court-requested and CPS-requested reports in a US jurisdiction and systematically coded them against a range of criteria. A high proportion of the reports contained serious limitations, in that they: were sometimes completed over a single session; did not clarify the informed consent process; did not include a home visit; did not seek information from other informants; and they did not reference

relevant file records such as child protection, medical, psychiatric or criminal histories (Budd, Poindexter, Felix, & Naik-Polan, 2001). Analysed by type of professional conducting the assessment, there was a consistent pattern of better-quality assessments completed by the Parenting Assessment Team (PAT). The PAT were a specialist group created to ensure adequate assessment of complex family situations. Reports from this group included behavioural methods (such as directly observing a parent-child interaction) and had a strong focus on psychological characteristics relevant to parenting. The authors concluded that the shortcomings of many of the assessment reports were so serious that their use as a basis for decision-making in child protection cases was inappropriate (Budd et al., 2001).

Forty Polish PCAs were randomly selected and evaluated against the American Psychological Association's (APA) guidelines for conducting child protection PCAs. Overall, the study found that most Polish PCAs followed the APA's broad recommendations (Freedle & Zelechowski, 2015). Most of the reports included multiple methods for data collection, answered the referral question and included historical information about the parents in the analysis. However, many of the PCA reports did not provide recommendations linked to the referral question, and most of them provided child placement recommendations despite this not being contained within the brief (Freedle & Zelechowski, 2015).

4.7.2 Review of predictors of subsequent maltreatment

There are several studies using regression modeling to identify predictive variables for child maltreatment. Some of these have focused on assessing a clinical or normal population and used "child abuse potential" as their dependent variable (e.g. Rodriguez & Green, 1996; Nair, Schuler, Black, Kettinger & Harrington, 2003), while others have identified factors predictive of maltreating parents retaining child custody, maltreatment severity or of responding well to intervention (Larrieu, Heller, Smyke, & Zeanah, 2008; Sprang, Clark, & Bass, 2005; Yates, Hull, & Huebner, 1983). Cumulative risk has been shown to be more strongly predictive of

maltreatment risk than any single variable, demonstrating a heterogeneous and highly individualised model of child maltreatment (Larrieu et al., 2008; Steinhauer, 1991).

Sprang, Clark and Bass (2005) evaluated comprehensive sets of data on CPS-involved parents to establish associations with maltreatment severity. Multidimensional assessments were conducted with 208 maltreating parents, measuring demographic variables, adult factors including relational representations and attachment, and child characteristics such as internalising and externalising difficulties and developmental status. The outcome variable was severity of maltreatment rated from child protection database records. No demographic variables showed significant association with subsequent maltreatment. Several factors were significantly related to maltreatment severity, including parental substance use, limited trauma recovery, behaviour problems in the child, total family stress and qualitative features on the WMCI (Sprang et al., 2005).

Child protection databases have been analysed for potential predictors among administrative information. In one US-based study of 378 children followed from their first CPS report up until 16 years later, 81% had a substantiated re-report (20% within one year). Factors associated with re-report within one year were being younger, being non-white, and having a caregiver with more depressive symptoms (Jedwab, Harrington, & Dubowitz, 2017). In Australia, a 12-month study examined a wider range of variables associated with subsequent CPS reports. Child factors associated with recurrence were being indigenous, younger, and neglected, while parent factors included substance use, mental health problems and having a personal history of maltreatment (Jenkins et al., 2018). Of the 9,608 children in the study, about 40% were re-notified within the 12-month period (Jenkins et al., 2018). File data on recurrence from 505,621 children in the US showed that nearly 22% were re-notified to CPS within two years (Fluke, Shusterman, Hollinshead, & Yuan, 2008). In this large-scale study, child factors associated with maltreatment recurrence were being younger, being white

or mixed-ethnicity, and having a disability. Caregiver alcohol use was also associated with re-notification, but not drug use, and parent mental health status or maltreatment history was not examined as a potential variable (Fluke et al., 2008). There are some major discrepancies in the studies' findings, which may be due to: cultural and parenting differences such as recognition and/or reporting thresholds; differences in societal attitudes such as racism or stigma directed at families in poverty; notification and/or system differences; or, other moderating variables not identified. Younger children were more vulnerable to repeated maltreatment notifications than older children in all studies.

4.7.3 Limitations of PCA

Curtis (2009) discusses the limitation of PCA for child protection cases from the perspective of a family court judge, and outlines the experiences of parents. She reminds the reader that “many such parents are people with limited control over most aspects of their lives. For them, authority becomes one amorphous mass that they often resent, become hostile towards and resist”, and argues that every opportunity must be provided to parents to look after their children without intervention from the state (Curtis, 2009, p. 4). The opinion article points out that in requiring a PCA, the status quo is being upheld and extended. For children in OOHC for the duration of the assessment, this increases the likelihood they will remain there due to relational and stability factors – an arguably unjust outcome (Curtis, 2009).

The reliability and validity of PCAs also comes under question, as does the role of the assessor who may be an expert but is not a scientist. There is currently no system for ensuring the neutrality of assessors, and Curtis argues that those conducting PCAs should be evaluated for bias by keeping records of their recommendations to check for patterns (2009). These legal concerns are mirrored by those researching in the field of PCA for child protection. The tools or methods used for evaluation must be examined for accurate interpretation and consideration of context (Curtis, 2009; Jacobsen, Miller, & Kirkwood, 1997). Potential

methodological flaws include the use of indirectly-relevant measures of parenting, the comparison of parenting to optimal standards rather than good-enough standards, insufficient consideration of cultural differences and parents only being seen in one context (Jacobsen et al., 1997). These concerns are evidenced by the previously-mentioned US-based studies evaluating the quality of PCAs for court settings, which showed that some reports were methodologically flawed to the extent that they should be considered unsuitable as a basis for child welfare decision-making (Budd et al., 2006; Budd et al., 2001, p. 105). However, given that the more recent evaluation study based in Europe showed a stronger adherence to best practice guidelines, it is possible that there has been a quality improvement over the past ten to twenty years (Freedle & Zelechowski, 2015).

4.8 Summary and synthesis: what questions remain?

Significant knowledge gaps remain regarding the psychological characteristics related to subsequent harmful parenting among CPS-involved parents. Modern social work models are likely to include estimations of aspects of the parent's psychological presentation, such as mental health diagnoses, motivation and automatic responses, but they do not adequately address parents' internal thoughts and feelings about their child, or their ability to understand and respond appropriately to the emotional states of their child (Platt & Riches, 2016a).

Research carried out over the past two decades indicates that these factors (parental relational representations and RF) are strongly associated with parenting responsiveness and child outcomes. Some studies suggest that parents who have poor abilities in these areas may also have self-regulatory differences that may undermine treatment engagement and be associated with higher levels of maltreatment severity (Berthelot et al., 2015; Slade, Grienenberger, et al., 2005; Sprang et al., 2005). High-quality decision-making regarding child placement in welfare settings is of vital importance, but the evidence base upon which these decisions are

made is limited. Each individual case therefore becomes a natural experiment, whereby different interventions are trialled until the parent's failure to respond is demonstrated and child removal into care is the last resort (Brown & Ward, 2014). This situation leaves children exposed to further suffering along with serious developmental consequences.

To date, there is no PCA model that has been evaluated for its predictive accuracy in estimating the likelihood of future harmful parenting. The published models demonstrate some consensus regarding a few essential ingredients to include when assessing CPS-involved parents, but no empirically-supported 'gold standard' exists against which assessments can be evaluated. The nature of the PCA means that randomised trials are unethical, and there are challenges in retrospectively evaluating whether any given assessment was sufficiently predictive – when a child is uplifted into OOHC, there is no reliable way of estimating the extent of the harm or safety they would have experienced had they remained with their parents. In lieu of accuracy, reports have been evaluated for quality and adherence to guidelines, with the assumption that reports of high quality are also likely to be beneficial or accurate.

Actuarial predictive models and alternative PCA approaches have been trialled. Large administrative data yield insights on a population level, showing which factors increase relative risk. These vary widely between communities and are important to consider at the individual, familial and community level within their specific social contexts. To apply these unilaterally to individual cases is inappropriate however, and risks inadvertently reinforcing systemic or institutional biases. Methodological approaches such as longitudinal designs can supplement cross-sectional designs, and are promising from both a theoretical and practical standpoint. To give parents the opportunity to engage with services, then monitor their response to intervention, may be a robust way to evaluate their likely future behaviour and provide a case-specific evidence-base for individual decision-making.

There are several areas of inquiry that have emerged regarding PCA in the context of maltreatment. The relevance of parental RF for predicting parenting behaviours has been demonstrated, but whether this holds true among a group of high-risk parents is unknown. Parental attachment representations are likewise predictive of infant attachment status, and this link is well demonstrated. Parents with strong abilities to regulate their emotions and cope with distress may be more likely to parent safely and have higher mentalization capacities. Yet questions remain about whether parents' emotional regulation ability and attachment representations are predictive of subsequent harm. Having a personal history of maltreatment is a clear risk factor at a population level, but effect sizes regarding this association are modest at best. Actuarial methods suggest that cumulative risk is the strongest predictor of subsequent harm among a heterogeneous group of parents, but this may not hold true among parents whose cumulative risk scores are all high relative to the general population of non-maltreating parents. It is likely that harmful parenting is the function of multiple processes occurring over time between the individual, their history and their current situation. The review of the research literature prompts the following research questions:

Among a group of parents involved with child protection services in Aotearoa/NZ, what are the psychological characteristics related to parenting that are associated with subsequent child maltreatment?

Do existing parenting assessment interviews and psychometric measures reliably predict levels of subsequent child maltreatment among parents involved with child protection services?

The broad aim of this study is therefore to investigate the extent to which various measurements of parenting and psychological characteristics among a high-risk sample predict subsequent maltreatment.

Chapter 5

Methods

This chapter describes the present study from its initial design through to implementation, data collection, collation and coding. Firstly, the rationale for the research question is summarised along with the rationale for the study design. This is an exploratory study using a prospective, longitudinal design. Secondly, the assessment method along with measures used is described. Ethical procedures, the sampling frame and the participants are then described, followed by measurement procedures. This includes the access to the participants, the process of engagement with relevant sectors and study partners, and consenting processes. Finally, there is a step-by-step summary of each stage of data collection followed by scoring and coding procedures. Flow-charts are provided where appropriate, to support the prose descriptions of each stage. Further specific information is provided in the appendices. Steps to address the primary research questions were to: a) recruit parents involved with CPS who had their youngest child in their care; b) conduct a range of structured and unstructured interviews and psychometric assessment with each parent; c) collect administrative data on notifications occurring both before and after the assessment; and, d) examine relationships between assessment data and subsequent notifications of harm over a follow-up period of eight months. Secondary research aims were to examine the reliability of parenting assessment tools and measures for CPS-involved parents, and to analyse the relationships between interview-based and psychometric-based measures.

5.1 Study design

This section describes methodological approaches and their potential for providing useful information about the research question, along with considerations of feasibility and generaliseability to a wider sample of CPS families. The research question could be addressed via a range of research methods, each of which has its advantages and limitations. Working to a doctoral timeframe while researching in a high-risk field such as

child protection meant that several approaches were neither feasible nor ethical. The target population were parents who had ongoing involvement with CPS in Christchurch, Aotearoa/NZ. The study was begun in 2015, and there was a limit of 18 months for the data collection phase, once begun. Participants were included if they had at least one child under the age of 11 who had never been removed from their care, if they had ongoing involvement with CPS, and if they consented to take part in the study. The reporting of this study was informed by the STROBE guidelines (Cuschieri, 2019).

5.1.1 Justification for the design: competing designs

Research approaches that were ruled out for ethical and safety reasons included experimental designs, case studies and a large cohort study. The following section summarises these with reference to their advantages and limitations. These include feasibility and ethical considerations along with their potential for addressing the research question.

5.1.1.1 Experimental designs

Experimental designs require the control and manipulation of variables along with randomisation. To manipulate variables which may impact on a child or family's safety is unethical and unsafe. Quasi-experimental designs, where randomisation is not possible but exposures vary naturally among families, may be possible and are likely to yield useful information for other research questions in this field. The present research question, however, could not be addressed through a true experimental study design. Natural experiments are more suited to this field, however, and would provide very useful information were measures of interest collected for a range of parents who were then followed over time. Although uncontrolled, analysing in-depth information about real-world cases over a longer period of time may yield insights about patterns of maltreatment related to particular psychological constructs.

5.1.1.2 Case studies

Case study designs and other qualitative methods are useful to increase knowledge about complex problems through a comprehensive analysis of a small number of cases. This allows for the exploration of a problem through various methodological approaches and can support the development of new, testable hypotheses. The field of child welfare research has yielded extensive case studies of systemic and individual failures, yet has failed to provide a systematic research base upon which the research question can be answered: the design does not allow for the assessment of causal relationships and findings cannot be generalised to the wider population. Further development of themes of interest, and potential associative relationships between variables, would be discoverable through qualitative research methods. Yet the selected research design needed to allow for the examination of predictive variables; this required quantitative methods examining the variables of interest over time.

5.1.1.3 Large cohort study

While case studies are insufficient for the inference of causal relationships, research designs fulfilling all of the necessary conditions for the determination of causality were unfeasible. The present study investigated parents' attachment representations, reflective functioning, personal histories, mood, parent-child interactions and emotional regulation. Some of these constructs are not reliably or validly measureable using currently-available questionnaires and surveys. A large research team would be able to measure these constructs in a large sample of parents, but this was not achievable within a doctoral study and timeframe. One option was to alter the constructs of interest and access administrative data to infer various constructs for a large number of parents. This could have included variables such as sex, age, ethnicity, notification history, outcomes from investigations, and referrals to other agencies. Using these variables in a large-scale, prospective and/or

retrospective longitudinal cohort study would have yielded useful information, but this type of research has been done in several large-scale international studies already (e.g. Jedwab et al., 2017; Jenkins et al., 2018) and was unlikely to yield new insights addressing the present research question. When research resources are limited, there is a tension between large and small-scale studies. A prospective cohort study with a large sample size may allow for causal relationships to be explored, but the constructs of interest require resource-intensive measurement methods, thus precluding this option for a doctoral thesis.

5.1.2 The selected design

The chosen research design, therefore, was a prospective longitudinal design (Taris, 2000). This allowed for the piloting of multi-modal assessment procedures that measured the constructs of interest with increased accuracy. This small-scale approach had the potential to provide new insights that could inform a larger-scale cohort design examining these constructs in future studies. Findings from this design could also be used to identify directions for interventions among the population of interest, and to further investigate the psychological constructs of interest among a local population of CPS-involved parents. The researchers could also explore the pragmatics and issues of conducting a larger study in this field.

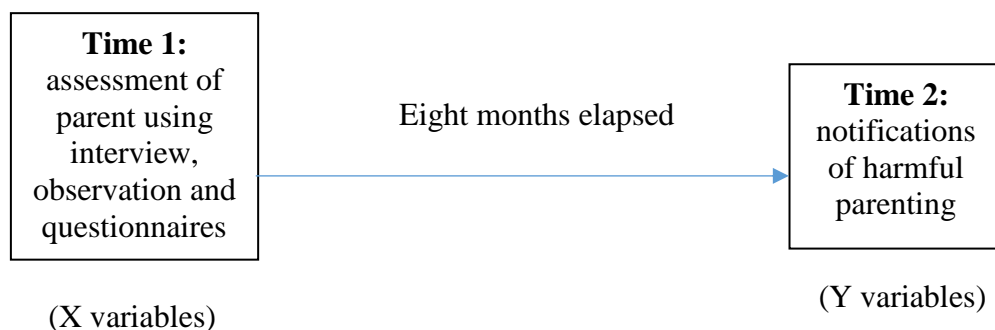


Figure 3 Research outline

5.1.3 Longitudinal design

There were several advantages to using a prospective, longitudinal design over a retrospective or cross-sectional design: (i) parenting attitudes and other constructs could be measured ‘live’ and risk for bias was lower; (ii) participants’ parenting behaviours could be observed directly by the researcher, and (iii) measures were less likely to be impacted by memory errors (but just as likely to be impacted by reporting errors) (Schwarz, 1990). One significant drawback was that the outcome variable (notifications to CPS) was estimated to be low in frequency, risking an inconclusive result due to a lack of statistical power. To mitigate this risk, the highest possible number of participants needed to be recruited during the data collection phase. Eight months follow-up time was chosen as the longest possible time from when Time 1 data was gathered from the final participant, and when analysis needed to begin in order to complete the study on time.

5.1.4 Rationale for intensive assessments

Chapter 4 identifies those parenting and parental psychological characteristics that should represent the scope of a comprehensive and intensive parenting capacity assessment. These include parenting characteristics, features of the parent-child relationship and child characteristics. Given that the focus of the present study is on identifying psychological characteristics among CPS-involved parents, child factors were not measured (beyond child age and number of children). Previous sections (4.2, 4.3, 4.4 and 4.5) provide a rationale for measuring attachment, parental reflective functioning, parents’ maltreatment histories and emotional regulation as part of PCA. Other psychological constructs or parent characteristics that were also of interest for this study are parents’ substance use, mood and parenting self-efficacy. Some of the models described in Chapter 3 described assessing these within PCA, and are all ecological variables that may increase or decrease risk of harmful parenting. A

final factor, a parent's 'sense of awareness of, and responsibility for, their child' has not been explicitly referred to in previous PCA models but was of interest to the researcher.

The examination of attachment representations, reflective functioning, personal histories, mood, parent-child interactions and emotional regulation required a multi-modal measurement approach that was systematic and replicable. PCA for child maltreatment cases, while extensively described in the literature, as yet has no empirically supported, replicable method. It is clear, however, that multiple methods should be used when assessing parental capacity and potential for change (Ward et al., 2014). This study devised a structured, replicable approach to parenting assessment that included a range of different methods: semi-structured interviewing, in-home direct observations and psychometric questionnaires, alongside CPS file information on notifications. These methods were feasible within a realistic timeframe and thought to be acceptable to the population of interest. However, in contrast to PCA approaches that would normally be used, there were no third-party informants, and other file information such as health or criminal justice histories were not able to be used. Additionally, no direct measures of child development, attachment or social-emotional functioning were taken. The assessment approach may therefore be called intensive, but could not be considered comprehensive, ecological assessments.

5.2 Ethical considerations, institutional approvals and Māori consultation

This study raised some significant ethical questions and these were managed in several ways. Firstly, participants' identities and information needed to be kept private and confidential. This was done through the usual methods of assigning a code number to each participant and using this on all documentation and data bar the consent form. Consent forms were kept secured, and the master list of names and participant codes was held by the principal researcher only. The second significant ethical challenge arose regarding the offering of

inducement for participation. Initially, it was agreed that this would place undue pressure on already-vulnerable parents to participate in the research. Many CPS-involved parents experience poverty, and their need for financial help may have led them to agree to participate despite their own misgivings. However, the principle of reciprocity, particularly from a tikanga Māori (appropriate cultural protocol) perspective, required that the researcher offer something of value in exchange for the participant's contribution. To address this, participants were given a NZ\$50 supermarket voucher as a 'koha' (gift) at the last face-to-face data gathering appointment, but they were not told about this at the time of consent or during active participation. This allowed them to freely withdraw from the project or decline to participate, but appropriate tikanga was also maintained. The third and most significant ethical concern was child or parent safety. It was possible that in the course of data collection, child protection concerns would be observed. This was managed by clear limits to confidentiality that were discussed with participants during the informed consent: if safety risks were found then notifications to CPS would be made. Full details regarding the ethical management of the project are contained in the ethics application form in Appendix C.

5.2.1 Māori Consultation

Māori are the tangata whenua in Aotearoa/NZ, and have a unique relationship with the Crown through te Tiriti o Waitangi. Under the principles of partnership and protection of tino rangatiratanga, research projects involving Māori are reviewed by academic experts, representing iwi interests, at the University of Canterbury. In January 2016, a formal application was made to the Ngāi Tahu Consultation and Engagement group for consultation as it was expected that some of the study's participants would identify as being of Māori ethnicity. The researcher met with Dr. Tracey Rohan, Research Consultant Māori at the time, and subsequently a letter was sent to the researcher providing formal advice on ensuring

cultural safety during both data collection and analysis, and giving support for the research to continue and include Māori participants (see Appendix D).

5.2.2 Human Ethics - University of Canterbury

Ethical approval for the research project was initially sought from the University of Canterbury's Human Ethics Committee (HEC) on the 10th March, 2016 (reference number 2016/14). Conditional approval was granted on the 13th September 2016, following two re-submissions in response to the HEC's comments and questions (see final HEC application, Appendix C & approval letters, Appendix E). The HEC stipulated that approval was granted subject to the project's approval by New Zealand's child protection department OT (Child, Youth and Family (CYF)/Ministry for Social Development at the time), and they required a letter from OT to confirm this in order to finalise approval. Four further amendments were sought from the HEC and approved regarding matters of procedure in participant recruitment:

1. Amendment 1 (approved 20th December 2016): for recruitment (and follow-up data, if needed) to occur via non-governmental organisations working with the target population, rather than through the government department OT.
2. Amendment 2 (approved 9th May 2017): for permission to keep data inadvertently gathered from participants who did not meet research participant criteria.
3. Amendment 3 (approved 8th May 2017): for permission to provide a koha (gift – supermarket voucher) as a “thank you” to participants after they had completed the time 1 data collection phase. This was sought following further cultural supervision with the Ngāi Tahu Consultation and Engagement Group.
4. Amendment 4 (approved 13th March 2018): for approval of updated information and consent forms, following the approach to the Canterbury District Health Board's Research Office and the need to meet their requirements.

5.2.3 Risks and steps to mitigate these

The study posed several risks to the participants, their children and the researcher. Firstly, eligible parents were considered inherently vulnerable. There was a risk that in discussing and disclosing personal information, participants would feel distressed or upset following data collection and that this would be potentially harmful to their wellbeing, or their children's wellbeing. This risk was mitigated through ensuring the researcher undertook the data collection in a sensitive and respectful manner, and did not press for specific details about abuse experiences. In particular, the researcher did not directly ask parents to disclose histories of abuse, mental illness or other experiences which may be relevant. Instead (as can be seen in the following sections), parents were asked open-ended questions and were able to withhold or disclose personal information as they chose. In addition, participants were asked how they were feeling at the end of each appointment, and reminded that they could ask the researcher to support them in accessing appropriate help if they needed it.

There was some risk to children in this study. The primary risk was deemed to be exposure to their parent discussing topics that may be upsetting or distressing to their children. The background interview in particular asked questions that were likely to result in verbal content that may include topics such as abuse, along with intense emotions such as anger, fear or sadness. This was managed by scheduling times for the background interview when children were at school or preschool. There was also a possibility that the researcher would observe behaviour or conditions which indicated a child was at risk of harm. In these situations, confidentiality was broken and a notification was made to OT of the concern, or the concern was discussed with the NGO service provider who had referred the participant to ensure that they were aware of it. This was deemed necessary on three occasions. One formal notification to OT was made, and two discussions took place with NGO service providers.

There were some risks to the researcher in undertaking field work of this nature alone. Specifically, conducting research in participants' homes posed risks such as exposure to unsafe people or environments. These were managed via a risk management plan which classified the risk level via a likelihood/consequence matrix and identified mitigating actions and behaviours (see Appendix F).

5.2.3.1 Researcher role and ethical boundaries

The researcher held several other professional roles throughout the duration of the doctoral study. She was a registered psychologist working with children and families in a variety of sectors including health, education and private practice, and she was a staff member at the University of Canterbury. This meant that she held relationships with OT, health and NGO services outside of the researcher role. She knew several of the NGO managers as both a practitioner having previously worked with some of the same clients, and as a staff member representing the University of Canterbury in meetings discussing student placements and progress. Although all dual roles were made explicit to all parties, and conflicts of interest disclosed and managed, this is likely to have influenced the course of the study. Two key areas were kept explicitly separate: the researcher declined all referrals for professional services directly from OT for the duration of the data collection, and there were no dual relationships with the OT department responsible for providing approvals on data access as this was based in the national office rather than in local office sites. All referrals for research participants that were known to the researcher were declined.

5.2.4 Child, Youth and Family/Ministry for Children Oranga Tamariki (OT)

OT were initially approached in December 2015 to discuss the project. The researcher and her primary supervisor met with New Zealand's Chief Social Worker in January 2016, at which he expressed support for the project going ahead in partnership with OT. The organisational change process (from the former CYF to the current MCOT) was flagged then

as a potential complicating factor in gaining approvals. Following approval from the University of Canterbury's HEC, OT were re-approached in August 2016, and in October 2016 the researcher was advised to approach the Investing In Children (IIC) research team. Ongoing communication, in pursuit of approval and collaboration, continued via email, phone until early 2017. A meeting was again requested, and one in-person meeting at OT headquarters in Wellington, New Zealand on the 4th May 2017 with a member of the research arm of the department, and verbal assurances were given that a letter of approval would follow. Following further requests, written confirmation of OT's willingness to collaborate and provide database information on participants was provided on the 7th August 2017 and signed on behalf of OT by a staff member with the title "Workstream Lead: Data and Evidence" (Appendix G). This was 12 months from the date of full, formal application.

Following approval, data collection continued with participants until August 2018. In July 2018, contact was attempted with the OT staff member who liaised with the researcher in order to establish a process and gather data for the first group of participants. The researcher was informed that the staff member who had overseen the approval was seconded to another organisation, and that the process was now being handled by a OT staff member with the title "Senior Analyst, Research Access Coordinator (RAC)". Upon contact, the new liaison staff member requested full documentation regarding the research and its previous approvals. This was requested and provided again in August 2018. From then until February 2019, several contacts were made regarding information requested, and regular updates were sought as to the status of the request. In February 2019 the request was escalated by the researcher to the liaison staff member's manager, and a face-to-face meeting was again sought to resolve any barriers. A timeline of contact with OT was sent, detailing the process. A third meeting occurred on the 20th March 2019, and details were given to the researcher demonstrating that the project had been dropped by the Research Access Committee, and had

not been progressed since it was first approved in 2017, until it had been subsequently re-assessed via a new process which was still being established in 2019. During this process, a request was made by the new Chief Social Worker's office that the project undergo a Privacy Impact Assessment (PIA). This was due to increased restrictions, during the time elapsed, regarding access to sensitive information held on OT's database CYRAS. However, the PIA process was primarily designed for large government agencies using software to interface with the database, not for research project access, for which there was no apparent process established. At this time, the requirement was for at least two deputy Chief Executives to sign off on the project and the release of the data to the researcher, based on a memo written by the RAC (liaison staff member). The liaison staff member requested further, updated information from the researcher, and this was provided on the 20th March. The researcher was also asked what a minimally-sufficient dataset might be, and this was also provided.

On the 15th April 2019, the researcher was contacted by the liaison staff member to inform her that OT had approved the minimally-sufficient dataset to be released to the researcher. Two months elapsed, during which further follow-up phone calls were made and further vetting was conducted by OT, and the data were released to the researcher on the 13th June 2019. This was eleven months from the request being lodged, and access to CYRAS for data was never approved. The data provided was not what was requested and was only count data for each participant rather than full details of each notification. There was no way to independently establish whether some notifications were omitted from the dataset, as only 'distinct' ROCs were included. Thus it is possible that ROCs that referred to a known risk or situation were omitted, as these would not be considered distinct.

5.2.5 Non-Governmental Organisations (NGOs)

When it became apparent that OT were unlikely to provide access to eligible participants within a timely manner, partnership with local Non-Governmental Organisations (NGOs)

was sought. Most parents who are referred to OT are, if the concerns are deemed justified, referred on by OT to the pathway “partnered response”. This consists of a referral to a non-mandated service to assist families with whatever type of support OT considered appropriate. Eight local NGOs were identified who work with the target population (STAND, Barnardos, Family Help Trust, Methodist Mission, Presbyterian Support, Cholmondeley, Open Home Foundation and Early Start). These organisations were chosen due to their locality and their work with parents who have had, or have, ongoing involvement with OT. Approaches to these organisations to request support in recruitment began in 2016 and continued through to August 2018.

5.2.6 Canterbury District Health Board (CDHB) – Gateway Service

One service that consistently met with parents eligible for inclusion in the study was the Gateway service, based at Christchurch Public Hospital, run by the Canterbury District Health Board (CDHB). The Gateway service coordinates assessment for children who are in need of care and protection, referred by OT. The researcher met with the clinical manager and head paediatrician on the 18th May 2017, at which point they agreed to support the research by recruiting in the same way as the NGO services. For this to occur, prior approval was needed from the CDHB’s Research Office, in addition to the approvals already gained. In order to apply to the CDHB’s Research Office, approval from Te Komiti Whakariti (Māori research oversight group) and the New Zealand Health and Disability Ethics Committee was required. Following approval from those two entities (details below), approval from the CDHB’s Research Office was initially sought on the 13th September 2017, and was granted on the 26th April 2018 (Appendix H).

5.2.7 Te Komiti Whakarite

The CDHB employs experts from the local iwi to co-review research applications where participants may identify as being of Māori ethnicity. This ensures that research conducted

through the CDHB is consistent with the principles of the Treaty of Waitangi. Application to Te Komiti Whakariti was submitted on the 26th September 2017, and subsequently approved on the 6th October 2017 (see Appendix I).

5.2.8 New Zealand Health and Disability Ethics Committee

The New Zealand Health and Disability Ethics Committee (HDEC) reviews research proposals and applications and provides approval for those that meet established ethical standards. This is legislatively required for some research projects conducted through the CDHB, and this study required full review due to its focus on vulnerable populations.

Application to New Zealand Health and Disability Ethics Committee (HDEC) was submitted on the 9th January 2018, and approval was granted on the 9th March 2018 following a full review by the HDEC, and in-person attendance before the panel at the review meeting, in February 2018.

5.3 Study sample

5.3.1 Sampling frame

Targets for this non-random sample selection were decided based on the researcher's knowledge and experience of the local sector. Potential participants included all eligible parents who were referred to one of eight local NGOs or the Gateway Assessment service at the CDHB. These services, bar the Gateway service, provide a 'partnered response' to OT. This means that when a notification is received by OT and there are some concerns about parenting, OT refer the family to one of their partner NGOs. These NGOs are for the most part funded through government contracts, and many have contracts specifically to work with the target population of CPS-involved parents. The Gateway services provides assessments of vulnerable children's educational and health needs. Many of the children they assess are already in OOHC, but they also assess children remaining with their families of origin but who are considered 'on the edge of care'. In the absence of direct referrals from OT for

participation in the study, these were the most direct ways to access eligible participants.

Points at which parents became eligible for the present study are illustrated by Figure 4, with the white arrows denoting the parents who would be eligible for this study. The exact number of parents in this category during data collection was unknown, but was estimated to be 200-400 in the Christchurch region. Of all parents eligible for this study, only those who consented to receive parenting intervention were captured within this sampling frame.

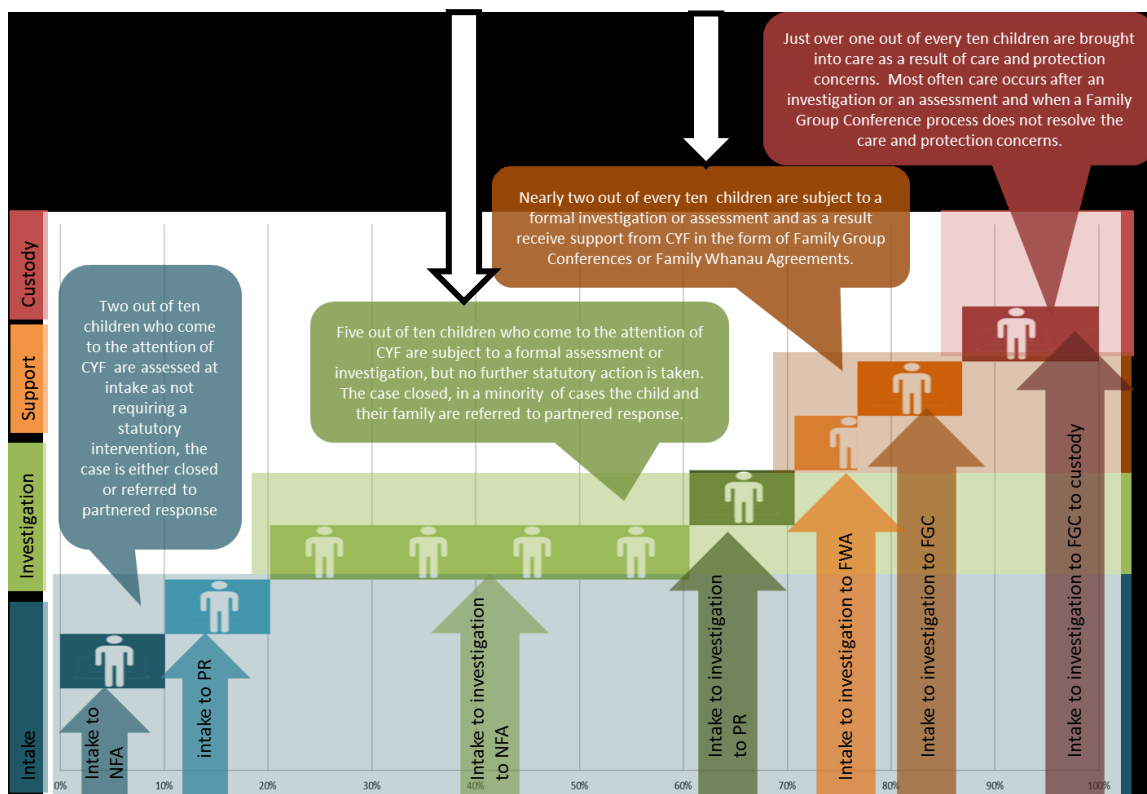


Figure 3 Pathways of all children who were engaged with CYF in 2013 (white arrows added; Rebstock et al., 2015, p. 150)

5.3.2 Sampling procedure

A purposive sampling procedure was undertaken in order to access high numbers of eligible participants. Minor prior relationships existed between the researcher and some of the NGOs, potentially affecting rates of referral to the study.

5.3.3 Selection criteria

Parents were eligible to participate if: (i) they were the biological parent of a child who was under the age of 11 and in their care; (ii) their youngest child had never been removed from their care by OT for more than a few days; and (iii) they had ongoing or recent involvement with OT. This last criterion was based on self-report from the parents, and discussion with their NGO worker, and included some families who were under “Children’s Teams”. The Children’s Team is a non-mandated service overseen by OT, and considered less severe in presentation than families who are being monitored by OT. However, discussions with the Children’s Team revealed that most of the families involved in their service were referred to them by OT, and had received several notifications of concern about child wellbeing. Parents whose involvement with OT was historical (i.e. not within the previous 12 months), and parents whose involvement consisted of a single notification of concern, were not included as participants. There was no feasible process, at the time of data collection, of checking for previous OT involvement.

5.4 Study factor measures: participant characteristics and parenting

Three types of assessment data were gathered. Firstly, demographic and background information was elicited through a semi-structured interview. Secondly, participants completed a number of self-report psychometric questionnaires measuring their substance use, emotional regulation, parenting and mental health. Finally, attachment representations and reflective functioning were assessed from participants’ responses to a structured interview protocol. Validity, reliability, accessibility and ease of use were prioritised when reviewing available measures.

5.4.1 Semi-structured interview protocol

Three key areas were measured through semi-structured interviews. Participants’ present-day main concerns were discussed first, with the second section covering their childhoods,

including parenting and schooling. The final brief section covered parents' current coping strategies and their hopes and dreams for themselves and their child. While all of these areas could have been measured via questionnaires, it was thought that further forms to fill in would not be acceptable to the participants and that face-to-face discussion of often-difficult topics would be more appropriate.

5.4.1.1 Rationale for querying participants' main concerns

Information on participants' presenting problems was sought. The purpose in asking about their main concerns was to give parents an opportunity to express stressors that may be an immediate concern. It was considered likely that, in meeting with a psychologist/researcher, they would have thought about their problems prior to meeting and be prepared to speak about these. It was expected that participants may have experienced frustrations with OT, or have other information that they wanted the researcher to understand. The decision to begin with this question was based on the researcher's experience in interviewing families under stress.

5.4.1.2 Rationale for querying participants' background experiences

Participants' background experiences were measured via semi-structured interviews. The rationale for asking questions about participants' backgrounds was to gain an understanding of developmental factors that may have contributed to current difficulties in parenting or daily life. It also gave parents a chance to hypothesise about their own parents' parenting, a key question in the measurement of reflective functioning. The final questions gave participants an opportunity to reflect on the coping strategies they had employed so far and the strengths of themselves and their children. This served a therapeutic function as well as providing valuable assessment information. Specifically, allowing parents to reflect on their own strengths and resources at the end of an interview was intended to provide a small

buffer to feeling upset or distressed following the assessment appointment, as well as a re-orientation to their present and future.

This information could have also been gathered through specific questionnaires related to trauma, such as the trauma symptom checklist or the initial trauma review (Briere, 2004). This provides limited answering options which is useful for quantitative analysis. The disadvantage of using a psychometric measure of background experiences is that parents would have to choose between existing options. Being able to describe their upbringings in their own words was considered a more valid representation of how parents saw their lives and experiences, and a better way to ensure that participants' dignity was upheld throughout data collection.

5.4.1.3 Procedure for gathering demographic data

Participants were asked to provide their names, addresses, ethnicities, dates of birth and a contact number for a close friend or family member. The rationale for gathering contact details of a friend or relative was due to the possibility of losing contact with participants for any reason, and this was discussed with the participant at the time. Participants were also asked how many children they had, their approximate ages and the age of their youngest child in months. Birth dates for children were not collected.

5.4.1.4 Procedure for gathering current presenting problems for the parent

Participants were initially asked about their main concerns or worries, their biggest problem at the time of assessment and their current involvement with OT. These few questions followed a semi-structured approach and were re-phrased for clarity as needed.

5.4.1.5 Procedure for gathering background information

Participants were asked about their personal histories. This followed an open, semi-structured format, with follow-up questions asked as appropriate. Parents described their

own childhoods, and then were asked what they wished had been different, if anything. Participants were asked to describe their own parents, including both biological parents and foster parents, or other family caregivers. Further questions about their current relationships with their parents followed, and participants were also asked to think about why their parents parented the way that they did. Participants were asked about their schooling and what it was like, and they were asked to comment on their own academic performance at school. They were asked to pinpoint, if they could, the time in their lives when they believed that things began to go wrong for them. Participants were also asked to describe a good time in their own lives, when they felt that things were going well for them. Following this, they were asked to describe their own current coping strategies. At this point, their struggles and the impact of these on their own wellbeing were acknowledged, where appropriate, by the researcher. Finally, parents were asked to describe their own hopes and dreams for themselves and their child or children.

The interview outline:

- a. “What was your childhood like?”
 - i. Follow up – “what do you wish had been different?”
- b. “What sort of parents did you have?”
 - i. Follow up – “how close are you to your parents now?”
 - ii. Follow up – “why do you think they parented the way they did?”
- c. “What was school like for you?”
 - i. Follow up – “how did you do academically?”
- d. “When did things start to go wrong?”
- e. “Tell me about a good time in your life, when things were going well”
 - i. Follow up – “how do you cope with tough times, how do you do it?”

- ii. Follow up – “what are your hopes and dreams for you and your child/ren?”

While the participant was talking, hand-written notes were taken by the researcher. These data were not recorded in any other way. The researcher also used basic counselling skills during the discussion to encourage further disclosure on the part of the parent. These included: (i) ‘minimal encouragers’ such as nods and agreement, (ii) open ended follow-up questions, (iii) summaries of what the parent had said, followed by a clarifying question, and (iv) reflection of feeling. The researcher’s approach was generally sympathetic and attentive in tone. These techniques elicited full descriptions from participants, although many did not give specific answers to all of the interview questions. Due to the less-structured nature of this section, participants were not pressed for answers to questions they had omitted, and the focus was on an overall “narrative” by the parent rather than on gaining specific facts from their histories.

5.4.2 Self-report psychometric questionnaires

5.4.2.1 Substance Use Disorder (SUD) screening assessment

A drug and alcohol screening assessment was needed to identify parents with heavy or severe substance use, and gain a measure of current levels of substance use for all parents. This was not intended to identify parents with a substance use disorder requiring intervention.

i. Candidate measures: The Drug Use Disorders Identification Test (DUDIT) was developed to identify drug dependence or problematic use, and has been used for more than a decade with a range of populations (Hildebrand, 2015). Given Aotearoa/NZ’s high rate of cannabis use, scales specific to that were also considered (Lopez-Pelayo, Batalla, Balcells, Colom, & Gual, 2015). The Drug Abuse Screening Test 10-item has been used with a wide range of populations in a large number of studies (DAST-10; Skinner, 1982, 2008). The 11-

item DUDIT is similar to the DAST-10, but item responses are graded for frequency rather than a simple yes or no. Cannabis-specific measures were ruled out due to conflation of regular use with problematic use and a lack of research studies supporting any scale with a range of high-risk populations (Lopez-Pelayo et al., 2015).

ii. Justification for selecting the DAST-10: There appeared to be no advantage to the DUDIT over the DAST-10. The DAST-10 has been used with high-risk populations in a range of cultures over three decades, whereas the DUDIT's use was mainly in northern Europe (Hildebrand, 2015). The DAST-10 was chosen for its ease of administration, its focus on problematic substance use and its inclusion of all types of illicit drugs.

iii. Psychometric properties and utility of the DAST-10: The DAST-10 has been used in studies including participants with: severe and persistent mental illness, mothers who have a history of child maltreatment, and mothers who grew up with child welfare involvement and who have child welfare involvement themselves (Fusco, 2015; Lang, Rodgers, & Lebeck, 2006; Maisto, Carey, Carey, Gordon, & Gleason, 2000). The DAST comes in two versions, one with ten items and one with twenty items, and all items have “yes” or “no” as possible answers. Both versions have been compared with structured, diagnostic interviews for identifying substance use disorders. The DAST-10 (see Appendix J) was found to have adequate sensitivity and specificity through Receiver Operator Characteristic (ROC) analysis, and good reliability shown by high Cronbach's alpha scores when compared with the gold-standard diagnostic interview assessment (Area Under the Curve $\geq .90$, $\alpha \geq .80$; Villalobos-Gallegos, Pérez-López, Mendoza-Hassey, Graue-Moreno, & Marín-Navarrete, 2015). Scores can range from zero to 10, with a recommended cut-off of three indicating drug use likely to meet DSM criteria for a substance use disorder (Skinner, 2008). Some researchers have reduced the cut-off to one in the context of parenting and child protection, with the belief that any use is likely to be harmful (e.g. Orsi et al., 2018). Indeed, Harvey

Skinner recommended that even for respondents self-reporting scores within the “low” range, brief counselling is recommended (Skinner, 2008, p. 5).

iv. Procedure for administering the DAST-10: The DAST-10 was introduced to parents and its purpose explained. For this questionnaire, because it referred to illegal activities, reassurances were reiterated as to the confidentiality of their responses and their overall anonymity.

i. Candidate measures – alcohol use: Several measures for alcohol consumption were reviewed for suitability, including the Michigan Alcoholism Screening Test (MAST), the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) and the Alcohol Use Disorders Identification Test (AUDIT; Babor, Higgins-Biddle, Saunders, & Monteiro, 2001; Deady, 2009). The ASSIST has good psychometric properties and covers both alcohol and drug use, takes only 5-10 minutes to administer and provides risk categorisations. The MAST correlates with diagnostic categories more closely than the AUDIT, but takes slightly longer to complete and reflects lifetime use more accurately than present use (Deady, 2009).

ii. Justification for selecting the AUDIT: Although the ASSIST appears to be a robust global measure of substance use, the inclusion of tobacco smoking into a unitary score risked confounding scores with an addiction behaviour that is less related to harmful parenting than mind-altering substances. Gaining separate measures for alcohol and drug use was also desired for the present study, as drinking levels in Aotearoa/NZ are significantly higher than rates of drug use (New Zealand Drug Foundation, 2013). The AUDIT was developed by the WHO for use in primary-care settings, in order to identify people engaging in harmful levels of alcohol consumption (Babor et al., 2001). Like the DAST-10, it has been used with a wide range of populations in a large number of studies,

including (for example): young adults with histories of child maltreatment and out-of-home placement and parents with involvement with child protection services (Freisthler, Kepple, Wolf, Curry, & Gregoire, 2017; Orsi et al., 2018; Yuan, Duran, Walters, Pearson, & Evans-Campbell, 2014). The AUDIT has been extensively reviewed since its development in 1992.

iii. Psychometric properties and utility of the AUDIT: When compared to other alcohol use measures, median specificity across reviewed studies was .89 and median sensitivity was .86. Median reported Cronbach's alpha was over .8 suggesting good reliability, and it has also been used in a high number of countries outside the US where it was developed (Reinert & Allen, 2002). The AUDIT has ten multi-choice questions and yields a score between zero and 40, with a recommended cut-off score, indicating a likely alcohol problem, of eight (see Appendix K). Some researchers have reduced the cut-off to five in the context of parenting and child protection, and there is some evidence to suggest that a cut-off of eight reduces sensitivity but increases specificity for females and a cut-off of five or six may be more appropriate (Orsi et al., 2018; Reinert & Allen, 2002).

iv. Procedure for administering the AUDIT: This questionnaire was introduced to participants and its purpose explained. If parents answered the first two items in ways that showed that they did not drink any alcohol at all for the past six months, the researcher skipped to items nine and ten as per the manual's instructions.

5.4.2.2 Emotional regulation

i. Candidate measures: The Cognitive Emotional Regulation Questionnaire (CERQ), the Emotion Regulation Questionnaire (ERQ) and the Difficulties in Emotional Regulation Scale (DERS) were reviewed for suitability for inclusion in the present study (Garnefski & Kraaij, 2007; Gratz & Roemer, 2004; Gross & John, 2003).

ii. Justification for selecting the DERS: Although emotional regulation appears to play key role in parenting, there are few well-validated psychometric self-report measures of the construct that have been trialled with high-risk or clinical populations (Rutherford et al., 2015). No studies to date were found that administered the ERQ with high-risk or abusive parents, although it has been used in studies with parents from a general community population (Enebrink et al., 2013). The CERQ has been used with adults with bipolar disorder and to examine anxiety and depression in adults with autism spectrum disorder, but no studies to date were found using the measure with high-risk or abusive parents (Bruggink, Huisman, Vuijk, Kraaij, & Garnefski, 2016; Green et al., 2011). The DERS has been used to research emotional regulation in women with Borderline Personality Disorder but no data to date have been published on its use with parents in the context of child maltreatment (Gratz et al., 2006; Gratz, Tull, & Levy, 2014). Overall, the DERS was chosen for its availability and its prior use with a population known to have difficulties with emotional regulation.

iii. Psychometric properties and utility of the DERS: The DERS was developed to assess emotional regulation across a range of areas, and yields scores for six domains: acceptance of emotions, the ability to achieve goals when upset, the ability to inhibit impulses when upset, awareness and understanding of emotions, the ability to use strategies to manage emotions, and emotional clarity (Gratz & Roemer, 2004, p. 43). Scores can range from 36-180, and each item is answered on a five-point Likert scale ranging from one (“almost never”, or 0-10% of the time) to five (“almost always”, or 91-100% of the time). Summed item scores yield a total score and scores for the six domains described above (see Appendix L).

Initial analyses of the measure yielded high levels of internal consistency, with Cronbach’s alpha of .93 for the whole scale, and alphas > .80 for subscales, but the

measure's reliability has not yet been sufficiently tested (Gratz & Roemer, 2004).

Preliminary analyses only are available for the DERS' predictive validity with regard to other measures related to emotional regulation, but suggest some clinical utility, particularly with regard to two subscales (the ability to engage in goal-directed behaviour, and the ability to manage impulses when upset). Difficulty with emotional regulation is not a standalone psychiatric disorder, and so the measure's specificity and sensitivity cannot easily be measured against other assessment methods such as a structured diagnostic interview.

iv. Procedure for administering the DERS: The scale was introduced to the parent by first explaining what it aimed to measure, and the way this was measured. It was reiterated that there was no "right" answers to any of the questionnaires.

5.5.2.3 Parental self-efficacy

i. Candidate measures: A recent review of measures of parenting self-efficacy included 34 measures, with reportedly varied quality (Wittkowski, Garrett, Calam, & Weisberg, 2017). There was a tension in choosing the best overall measure for the present study, as the 'best' measures are those that estimate parenting self-efficacy for a specific child age range, and some of these are for mothers only. Parents' youngest children in the present study could be any age from a few months to 11 years, so the measure needed to be appropriate for use with both mothers and fathers, and with a wide range of child ages. For these reasons, the Perceived Maternal Parenting Self-Efficacy (PMP-SE) and the Self-Efficacy for Parenting Tasks Indexes (SEPTI-TS) were ruled out along with others that targeted only parents of infants and toddlers. The Measure as a Parent (MaasP) was a general tool for all ages, but in particular children over 12 years of age, and has not been widely studied with high-risk parents (Wittkowski et al., 2017). The Parenting Sense of Competence Scale (PSOC;

Gibaud-Wallston & Wandersman, 1978) measures parenting satisfaction and self-efficacy with a 16-item self-report questionnaire.

ii. Justification for using the PSOC: This scale has been widely used and extensively studied, including with parents who have histories of child maltreatment or who are considered at high risk of maltreatment (e.g. Borelli et al., 2010; Crnec, Barnett, & Matthey, 2010; Martinez-Torteya, Katsonga-Phiri, Rosenblum, Hamilton, & Muzik, 2018; Polinsky, Pion-Berlin, Williams, Long, & Wolf, 2010; Wittkowski et al., 2017). The PSOC was also readily available and estimated to be acceptable to the target population, as evidenced by its extensive prior use in the literature.

iii. Psychometric properties and utility of the PSOC: The PSOC has adequate psychometric properties with regard to internal reliability, with alphas of .80, .77 and .80 for mothers, fathers (efficacy) and fathers (satisfaction) respectively. Cross-informant reliability, and convergent and discriminant validity have all been studied and found to be sufficient, although the wording of the items suggests that the two-factor structure of the measure may be an artefact of item valence (i.e. all items related to efficacy are worded positively, whereas all those related to satisfaction are worded negatively) (Crnec et al., 2010; Hurley, Huscroft-D'Angelo, Trout, Griffith, & Epstein, 2014; Ohan, Leung, & Johnston, 2000). Item responses are structured as a 6-point (forced choice) Likert scale, with respondents indicating agreement or disagreement (see Appendix M). Item 17 was excluded from analysis as it does not load onto either subscale. Total scores can range from six to 96, with nine items measuring parental satisfaction and seven items measuring parental self-efficacy.

iv. Procedure for administering the PSOC: Participants were told that this scale was measuring their levels of satisfaction with parenting along with their feelings of confidence

(“self-efficacy” was considered jargon). As with the other questionnaires, possible item responses were outlined.

5.4.2.4 Mood: depression, anxiety and stress

i. Candidate measures: Measures of overall wellbeing were reviewed for suitability for the present study, along with specific measures related to mood disorders such as depression and anxiety. The Personal Wellbeing Inventory (PWI) and the General Health Questionnaire (GHQ) provide overall estimates of an individual’s subjective sense of wellbeing and have been widely used. The Depression Anxiety Stress Scale (DASS) is a 42-item self-report psychometric measuring symptoms of depression, anxiety and stress in adults (Lovibond and Lovibond, 1995).

ii. Justification for selecting the DASS: Unlike other measures, the items on the DASS were empirically derived rather than being designed around DSM classifications, and findings suggest that depression and anxiety are better conceptualised as being on a continuum rather than as discrete disorders. For the population in question, of whom many are non-clinical (albeit high risk), this measure provided more useful information than classification-based psychometrics (Lovibond & Lovibond, 1995). The DASS has been used extensively in relevant research. One study investigated the relationship between early life trauma, adult trauma and subsequent symptoms of mood disorder, finding that early life relational trauma was more significantly predictive of adult depression and anxiety than adult trauma (Chu, Williams, Harris, Bryant, & Gatt, 2012). Another study examined the relationship between dysfunctional discipline practices and depression, anxiety and stress among a group of parents with allegations of child maltreatment, finding a significant link between depression and poor disciplinary practices (Venta et al., 2016). A recent RCT of the PUP programme used the DASS alongside other measures to evaluate reductions in child abuse-related

measures among parents receiving treatment for substance use disorders (Barlow et al., 2019).

iii. Psychometric properties and utility of the DASS: Internal consistency within the measure is high, yielding alphas for depression, anxiety and stress of .95, .90 and .93 respectively (Crawford & Henry, 2003). Convergent and discriminant validities suggest that the measure performs very well psychometrically and theoretically, and it has been demonstrated to yield similarly-strong psychometric properties across different cultures (Crawford & Henry, 2003; Oei, Sawang, Goh, & Mukhtar, 2013). Questions are answered on a 4-point Likert scale indicating the frequency and severity of the symptom described in each item (see Appendix N). The psychometric properties of this measure are adequate, and factor analysis showed that severity of response on the DASS is similar to diagnosed clinical patients being treated for depression and anxiety.

iv. Procedure for administering the DASS: The researcher explained that the DASS was measuring participants' levels of depression, anxiety and stress levels over the past couple of weeks.

5.4.2.5 Parental focus and sense of responsibility

i. Candidate measures: Literature searching for a suitable measure of parenting sense of responsibility, awareness of and regard for their child's wellbeing was completed in 2015, and did not yield a previously-validated measure that was thought appropriate to the construct of interest. General self-report scales related to child maltreatment, such as the CAPI or the ISPCAN Child Abuse Screening Tool – Parent version (ICAST-P) do not perform well with regard to child neglect, and are susceptible to reporting bias due to their self-reporting format (Costello & McNeil, 2014; Runyan et al., 2009). Some self-report questionnaires and procedures designed to discriminate harmful from non-harmful

parenting have been unsuccessful when compared against directly-observed parenting, and scores do not differ between maltreating and non-maltreating parents (Haskett, Scott, Willoughby, Ahern, & Nears, 2006). Clinician-rated risk-measurement tools, such as those used in assessment parental capacity, focus on a broad range of factors related to parenting, rather than the hypothesised constructs of interest (van der Put et al., 2016).

ii. Justification for selection of the Parental Focus on the Child Scale (PFOCS): An original scale was therefore developed to operationalise parenting regard for, and focus on, their children. This is an hypothesised construct intended to quantify behaviours and attitudes associated with responsible parenting that do not seem to be well-captured by other measures. Given the evidence is poor for the predictive and convergent validity of self-report measures relating to maltreatment, the brief scale was designed to be scored by clinician judgement following interviews with the parent and an observation of the parent and child together. Ratings are given based on evidence which includes both directly-observed parenting behaviour and speech content when discussing parenting-related matters. Scores may range from six to 35, and ratings are given along a five-point Likert scale (Appendix O).

5.4.3 Structured interview protocol

i. Candidate measures: Three options were canvassed as measures for attachment relationships and parental reflective functioning (RF): the AAI, the PDI and the WMCI (Benoit, Zeanah, Parker, Nicholson, & Coolbear, 1997; Chiesa & Fonagy, 2014; Slade, Grienberger, et al., 2005). The AAI measures adults' attachment relationships with their own parents, and can also be coded for reflective functioning (RF). It has been used with high-risk parents, and the classification 'unresolved trauma' is closely related to the constructs of interest in the present study (Borelli et al., 2010). In particular, it may have been useful in illuminating mechanisms for the intergenerational transmission of trauma. The PDI

was based on the AAI, and was created specifically to examine parental RF in parents of young children. It is often used in conjunction with the Strange Situation as a measure of attachment (Huth-Bocks et al., 2014). Questions are strongly targeted towards eliciting mentalising statements from parents throughout the PDI, whereas the WMCI has fewer specific RF prompts and encompasses a wider range of parenting experiences.

ii. Justification for selecting the WMCI: The WMCI has been trialled with both mothers and fathers, and can be used with parents of younger and older children (Vreeswijk, Maas, & van Bakel, 2012). Its core purpose in development was related to attachment representations of the parent-child relationship, but it has also been used to measure parental RF in previous studies (Schechter et al., 2005; Vreeswijk et al., 2012). This was considered more suitable for the present study due to its focus on the parent's attachment relationship with their own child rather than with their parent as in the AAI. The disadvantage to the WMCI was its lack of a classification related to trauma, but this was also common to the PDI. On balance, the WMCI was considered the best fit for the present study due to its potential for yielding a robust measure of both parent-child attachment and parental RF, as well as its likely acceptability for parents involved with CPS.

Parental reflective functioning is made up of four aspects of reflective functioning, namely: "a) an awareness of the nature of mental states, b) the explicit effort to tease out mental states underlying behaviour, c) recognising developmental aspects of mental states, and d) mental states in relation to the interviewer" (Slade, Bernbach, Grienenberger, Levy, & Locker, 2005, p. 4). Questions that elicit RF are coded according to these four aspects, and an overall score is given that can range from -1, for "anti-reflective", bizarre or inappropriate statements, through to 9 for "full or exceptional" parental RF, which is characterised by personally significant, meaningful and integrated statements encompassing all aspects of reflective functioning.

5.4.3.1 Procedure for administering the WMCI

Introducing the video recording: The third stage of data collection consisted of the recorded WMCI. As described, participants had been told during the informed consent process that they would be asked to undertake a recorded interview, but that this would be done last. In most cases, this recording was completed upon the third home visit, so the participant and the researcher had spent at least two hours together by the time this was done. The researcher explained that the reason for it being recorded was that the participants' answers were going to be written down word-for-word. The researcher then asked whether they would be willing to be videoed with an iPad, but they were told that if they were uncomfortable with their face on the camera, the researcher would put the iPad facing the wall and it would become an audio recording only. The researcher explained that video was easier for her, as she was hard of hearing, so would use the video to help her understand the words if the audio was incomprehensible for any reason. One further step taken by the participant was to take a small recording of the participant first, or offer to sit in the spot where the participant was sitting with the camera on it, so the participant could see what the video would look like. Several participants wanted to see themselves, or the researcher in their spot, but most participants said this was not needed. Five participants chose not to have their faces on camera, and the remaining 21 who completed the WMCI agreed to it. Participants were assured that after the transcripts had been completed, the videos would be deleted, and that the video would be viewed by the researcher only, or a research assistant who signed a confidentiality agreement.

Introducing and administering the WMCI: The researcher was trained in the administration and interpretation of the WMCI by Diane Benoit, one of its co-creators, in 2015. Its content and instructions for administration can be found in Appendix P. Participants were instructed to be thinking about their youngest child for the whole interview, as all the questions are oriented towards eliciting parents' thoughts and feelings about one relationship. No

handwritten notes were taken as it was being recorded, and it enabled the researcher to give her full attention to the parent as they spoke. Minimal encouragers, summaries and occasional prompts were used to increase participant's explication.

Supplementary questions – parental RF: The WMCI was used to code parental RF, and to aid in this one further question was asked that is not in the original version of the WMCI. During the WMCI there is a section asking parents what behaviour in their child they find most difficult to handle. Parents are asked why they think their child behaves that way, how they respond, how they think their child is feeling at those times, and then the question was added “what do you think is going on in [child's] mind at that time?” This explicit request for parents to hypothesise about their child's state of mind was intended to increase the amount of text that could be coded for RF.

5.5 Outcome factor measures: subsequent child maltreatment and entry into care

To measure child maltreatment outcomes, information on notifications to OT was sought. Other possible measures of child maltreatment included parent-report psychometric measures such as the Child Abuse Potential Inventory or the Parent-Child Conflict Tactics Scales (Milner, 1986; Straus, Hamby, Finkelhor, Moore, & Runyan, 1998). For children over the age of four years, there is one promising measure of child physical and psychological abuse, a revised and modularised child-report version of the Conflict Tactics Scales Parent-Child (Sierau et al., 2018). For the purposes of this study, it was thought unlikely that parents would accurately self-report on their parenting. Furthermore, both existing questionnaires focus on physical abuse, not all types of maltreatment. As to using a child-report measure, the sampling frame included parents of children younger than four years so this was ruled out. As argued previously, the best available measure of child maltreatment is currently notifications of harm to CPS. Making a distinction between substantiated and unsubstantiated reports was considered, but OT reported that there were no discernible or meaningful differences between

these categories based on their own internal analyses of the data. This was in line with international research indicating little difference between reports that were substantiated and those that were not (Jedwab et al., 2017).

5.6 Study procedure

5.6.1 Recruitment

The recruitment process encompassed several steps: contacting the NGO, meeting with the NGO and gaining agreement to proceed, presenting to staff teams regarding the study and providing contact, receiving contact details for potential participants, contacting the potential participant and arranging a time and place to meet, and finally meeting with the potential participant to proceed with informed consent. Figure 5 summarises the overall procedure.

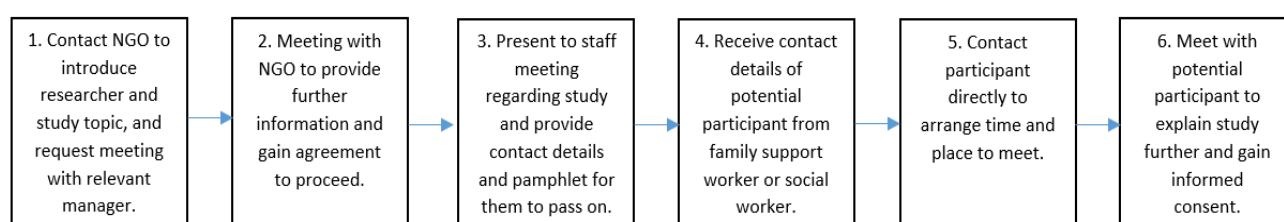


Figure 4 Recruitment steps to accessing eligible participants

5.6.1.1 Liaison with NGOs

Eight NGO in the social services sector were contacted via email or phone and a meeting was requested with the service's manager or practice advisor of the most relevant service area. The researcher met in person to discuss the project and its aims, how it might work for their organisation, and to check that they did in fact have clients that fit the participant eligibility criteria. Documentation was provided during this meeting or via a follow-up email, and consisted of a one-page pamphlet for parents, the ethics application and approval from the University of Canterbury, and a one-page summary of the research project. Following an early meeting with one NGO (Early Start), a photo of the researcher was added to the

pamphlet, as it was thought this would help participants feel more confident in allowing their contact details to be passed on. The full project proposal was offered to the services to read, and several organisations requested this. While most organisations processed the request at the managerial level, and were satisfied with the documentation provided by the researcher, two required more intensive review and formal application through internal ethical review processes (Barnardos and Early Start). Approval for proceeding was granted by all NGOs, either in written or verbal form. Organisational actions following this approval, such as replying to emails or forwarding information to staff members, varied considerably.

The researcher met directly with staff teams in each organisation bar two (STAND and Cholmondeley Children's Home) to introduce the research project, answer questions and concerns raised by staff members, and to request that they refer any eligible clients to the project. Feedback at the time, and following the meetings, was positive and staff members were supportive of the project and interested in the results. One staff member at one organisation expressed concern for their clients and made it clear they would not refer any participants. For those organisations that had referred at least one participant, follow up visits were made and emails sent requesting further participants.

5.6.1.2 Liaison with the Gateway Service CDHB

Liaison with the Gateway Service at the CDHB progressed in much the same way as with the NGO services, following the approvals process outlined above. The researcher met directly with the staff team who consisted of paediatricians, social workers, nurses and one psychologist. At this meeting, information was given out and staff members expressed interest in the project. No referrals for participants were received through this recruitment method, however, despite several follow-up emails and phone calls.

5.6.1.3 Access to participants

Participant referrals came to the researcher via phone call, text or email from staff members at partner NGOs. Referral forms were available and were scanned and emailed, and these provided space for further background information (see Appendix Q). Information that was required to be provided included the name of the potential participant, their contact number and any potential risks to the researcher. Referring staff members from NGOs took the parent pamphlet with them on home visits to families, and asked them in person if they would be willing for their name and number to be passed on to the researcher who would get in touch with them (see Appendix R). Potential participants were assured at this time that saying “yes” to this did not mean they were participants in the study, merely that they were willing to hear more about it and would have the opportunity to ask questions.

A phone call was made to the potential participant, and if the participant answered, the researcher introduced herself and checked that they had indeed said they were willing for their number to be passed on. The researcher explained that the study was looking at what happens for parents who have involvement with OT over time, and that more could be explained over the phone or during a face-to-face appointment. A time was arranged for a home visit, and prior to each home visit a text was sent as a reminder. Many participants did not answer their phone at first, and a text was sent to introduce the researcher and ask for a good time to make a phone call. Most participants responded with a text specifying a time to call. After the initial phone call, all contact with participants proceeded via text messages. Appointments were frequently missed by participants or cancelled at the time of the appointment. In the most extreme case, one participant either cancelled, or was not home, on eight separate occasions. Occasionally, the researcher attended a home visit and participants were not able to engage in the research activities due to sleepiness, having friends or family

around, or only having a short amount of time. In these cases, the researcher made another time to return to complete the process.

5.6.1.4 Non-completion and withdrawal from the study

A few participants, who had consented to engage in the study and begun data collection, were subsequently difficult to contact. Where participants were unresponsive to phone calls and emails, the contact number of a friend or family member was used to clarify whether the participant wanted to withdraw or wanted to continue. For three out of the 29 participants, full data sets were unable to be collected due to non-completion (one participant) or disengagement (two participants). In the case of non-completion, the participant had experienced feelings of anxiety following the initial visit, and did not answer the door to subsequent arranged visits. This parent had previously installed cameras on the outside and inside of her home and was known to feel scared of visitors. The participant was given the chance to have her data removed from the data set, but told the researcher, via her family support worker, that she wanted to stay in the study but was unable to complete the data collection due to her levels of anxiety. In the other two cases, phone calls and texts remained unanswered, and contact with the referring staff members from the NGO confirmed that the two participants had disengaged from all social services. It was apparent, in these cases, that there was significant and current conflict and disruption within the families, and following several, staged attempts to re-engage, the assessment process was abandoned. The participants, with the information collected up until that point, were retained in the final sample. No participants withdrew their consent.

5.6.2 Data gathering method

Baseline assessment data were gathered directly from participants face-to-face, following a phone contact to arrange a place and time to meet. Interview location was chosen by the parent themselves, and options included; the potential participant's home, a neutral, public

location like a local library or a café, or a clinic setting located at the University of Canterbury. All participants chose to have the researcher come to their homes bar one participant, who asked that the researcher meet at her friend's home along with a support person. All participants were given the chance to undergo the assessment process with another person or people there in support. Appropriate tikanga/kawa (rules and protocols for polite behaviour) were followed in all homes, regardless of ethnicity. The assessment process took between two and four appointments per participant, and appointments lasted approximately one hour.

5.6.2.1 Tikanga, conventions and protocols

Given that most of the data collection took place in participants' homes, correct and appropriate behaviour on the part of the researcher was essential. Consultation with the Ngāi Tahu Consultation and Engagement Group clarified appropriate behaviours that were applied to all fieldwork. Acting according to appropriate tikanga in New Zealand homes included the following (for example): being on time, removing shoes before entering, bringing kai/food such as a packet of biscuits, engaging in casual, friendly conversation for a period of time before beginning formal procedures, engaging with children or other adults in the home, and accepting offers of drinks. Occasionally, being on time was not possible so the researcher texted or called ahead of time to inform the participant.

5.6.3 Informed consent

Participants were given information about the purpose of the study, the way the gathered information was going to be used, the estimated length of time the process would take and the type of information that they would be asked to share. They were informed that they could withdraw from the study at any time. Methods for ensuring personal anonymity were described, along with the limits to confidentiality. Participants were told that data from their case files at OT would be accessed by the researcher, but they were assured that no

other information, bar their names and dates of birth, would be known by OT staff. They were also assured that their own social worker and site manager from OT would not know whether or not they had participated in the research, unless the participant themselves chose to inform them. Methods for information storage were described, along with an explanation of how information would be written up for publication in the University of Canterbury library or for journal articles, in ways that protected participants' identities. Participants were given information about the potential risks of taking part in the research, namely that they may feel upset or distressed after discussing personal information. They were assured that if that were the case, the researcher would help them to access an appropriate source of support. They were also given the contact details of the researcher, her primary supervisor, and the Chair of the Human Ethics Committee at the University of Canterbury and told to contact the Chair if they had any complaints.

5.6.3.1 Participant concerns and further information

Participants were given the opportunity to ask questions of the researcher and to express any concerns. The researcher used informal lay language when describing the study. In addition to the information above, the researcher explained to parents that although it was an opportunity to share their experiences, participating in this study would not help them in their individual situation. Specifically, its purpose was not to deliver a therapeutic intervention. Parents were also told that the purpose of the study was not to “get at” OT, but to further knowledge and understanding about what happens over time, in real life, for families who have ongoing involvement with OT. They were told that the purpose of the research was to more effectively help families like theirs in the future, and that the research might help design better interventions and supports for families. One reason for this supplementary discussion was an indication early in the data collection phase, suggesting that parents were hoping that the researcher would help them to advocate for their interests or to represent their views to

OT. Omitting this information would have amounted to undertaking the research on false pretences, and risked parents feeling unhappy when this did not eventuate. The clarification regarding the study being non-therapeutic was due to a risk that parents may have been hoping to receive support from the researcher.

5.6.4 Psychometric assessment and questionnaires

A brief description of the procedures for each questionnaire administered with parents has been outlined above. All procedures for questionnaires took place in the same way: the scale was first introduced and its purpose was described by the researcher. The possible types of answers were then described for each questionnaire, with reference to one specific item (usually the first item). Further explication about each type of possible response was given until the parent gave a response. This continued with each item until it was clear that participants confidently understood the response options. Parents were given the opportunity to read the questionnaire themselves and then write in their own answers, or they could go through each item individually with the researcher. Rates of independent completion (the parent writing in their own answers) were approximately one-third, with about two-thirds opting for the researcher to verbally ask for a response to each item. This figure is approximate as data on these rates were not collected. When it was clear that a participant was struggling to understand an item, the researcher would re-state it more simply, and then explain its meaning with reference to the possible answers. Answers were written by hand on the printed, compiled battery of questionnaires and each page was numbered with the participant's code when completed. These data were then scanned and entered into Excel spreadsheets for scoring.

5.6.5 Procedure for obtaining outcome data

Participants' names and dates of birth were released to one person at OT's research and evaluation unit in order for their team to extract the minimally-sufficient dataset. This was

sent via secure email with an encrypted file requiring a password to open. The date for each parent's initial meeting with the researcher was labelled "Time 1", and eight months from that date was labelled "Time 2". Notification data for the eight months prior to Time 1, and the eight months from Time 1 to Time 2 was collated by OT and sent to the researcher. Thus distinct notifications during a sixteen-month period were collected for each participant.

5.7 Statistical plan

5.7.1 Scoring and coding procedures for each measure

The following section describes how each type of data were scored, coded and then entered into spreadsheets as variables. As per the preceding sections, the outline follows the order in which the data were collected: demographic information, background information, questionnaires and the transcribed WMCI data.

5.7.1.1 Demographic information

Each participant was assigned a unique code, and the master list of participants' demographic information along with their code was held solely by the researcher. This number was used in all spreadsheets containing data, and was listed in the first column with other variables being entered into subsequent columns. Participants' dates of birth were used to identify their age in years at the time of initial engagement with the researcher, and the variable was recorded as a whole number. Reported ethnicities were coded as either Pākehā (New Zealand European), Māori or other, with participants identifying their dominant ethnicity if they were descended from multiple ethnicities. This variable was entered as a 0, 1 or 2 respectively. Sex was assigned as either 0 (women) or 1 (men). No participants identified as intersex or transgender. Participants were asked the age of their youngest child and, although dates of birth were not collected for children, their age in months was reported by parents and recorded in whole numbers. Participants' number of

children was recorded as a whole number as per their answer to the question, ‘how many children do you have?’.

5.7.1.2 Background interviews

Each participant’s hand-written notes from the initial background interview were typed up individually, then entered into compiled documents of all the answers to each section together. These were reviewed by the researcher and one supervisor to identify common themes, and they agreed, based on the contents, how to quantify the information. These themes included: risk factors described such as abuse or neglect, participants’ main concerns at the time of the interview, experiences of schooling, the onset of their problems, when their life was going well, coping strategies and their hopes and dreams for themselves and their children. A coding template was created, and each participant’s interview notes were coded by the researcher according to this template (see Appendix T).

Background risk factors. Common background risk factors were identified in the interview data and were coded as being reported or not reported (0=not reported, 1=reported). Note that “not reported” did not mean “did not occur”, just that the parent did not describe this when summarising their upbringings. The risk factors were as follows: physical abuse, sexual abuse, neglect, transience, having multiple caregivers, being in an out-of-home placement including a whānau placement, having had an older child removed and having had at least one prior suicide attempt or incident of serious self-harm. Total number of background risk factors were also recorded as whole numbers.

Background protective factor. Some participants described experiencing a good, protective relationship with one other person, and this was recorded as either 0 (no reported protective relationship) or 1 (reported protective relationship).

Main concerns. Based on the interview data, participants' main concerns were grouped as follows: conflict with partner, financial problems, ongoing court case, poor housing and conflict or stress with OT. Each concern was assigned a 0 (not reported) or 1 (reported) and entered into a summary spreadsheet.

Quality of the narrative. The researcher was collecting these data in vivo, and recorded very brief observation notes regarding the participant's overall presentation. This information, along with the handwritten notes, were used to code each participant's overall narrative along six domains: fragmentation, stream of consciousness, insight, intrusion of traumatic memories into narrative, expressed emotionality/intensity of affect and the presence of their child or children. Each rating was based on the amount of evidence for each construct and entered as a number from 1 (no evidence for this construct or behaviour) to 6 (major and saturated evidence for this construct or behaviour). Item scores were reversed for two variables: "insight" and "presence of child" to retain the direction of more desirable scores as being lower. It is acknowledged that the variable "intensity of affect" is not clearly desirable or undesirable for parents at either very low or very high ends of the rating scale.

Further questions. Participants' answers to further questions were categorised according to content then coded accordingly by the researcher. For the question "how was school for you?", the following responses were coded: 0 for no answer, 1 for answers with a negative tone or those that showed a dislike for school, 2 for an answer describing neutral or mixed experiences and 3 for an answer that described liking school or positive experiences. Answers to questions regarding when things started to go wrong were coded as follows: 0 for no answer, 1 for early childhood or from birth, 2 for childhood, 3 for adolescence and 4 for adulthood. Participants' answers to the question "tell me about a good time in your life, when things were going well" were coded as follows: 0 for no answer/never, 1 for a time during

childhood, 2 for a time during adulthood or working and 3 for the present time. Participants identified their coping strategies, and their answers were grouped and coded according to the following categories: 0 for no answer or “I don’t”, 1 for a generic statement such as “I just have to”, 2 for an unhelpful strategy such as using substances, 3 for a helpful strategy such as meditation or exercise and 4 for a strategy that included a relational support such as talking to a friend or professional. Participant responses to the question “what are your hopes and dreams for yourself and your children?” were coded as follows: 0 for no answer, 1 for adult dreams only specified, 2 for child dreams only specified and 3 for an answer that specified both child and adult dreams.

5.7.1.3 Psychometric questionnaires

All questionnaires were hand-scored by the researcher and individual item responses were entered into a spreadsheet with the participants’ unique code number. Summary scores were entered into a different sheet, and automated scoring (using Excel formulae) was checked against hand-scored summary scores. In this way, mistakes were identified and item responses could be re-checked against the original questionnaire.

5.8.1.4 Working Model of the Child Interview (WMCI)

Transcription procedures. Following the recording, transcripts were written with each participant’s exact wording including stutters, laughs and particularly long pauses.

Occasionally, exact wording of phrases was unclear, and this was noted in the transcripts with [indistinct]. All recordings were transcribed by the researcher or one of two research assistants, both of whom signed confidentiality agreements (Appendix S). No recordings were sent to outside agencies. All transcripts were checked by the researcher after transcription, and any key sections with indistinct words noted were re-checked.

Coding procedures. The researcher was trained in coding for clinical purposes by Diane Benoit in November 2016. All interview transcripts were read over before coding commenced. Coding sheets (Appendix V) were then used by hand when the transcripts were re-read, and comments on the narrative were noted down as relevant to the final classification. All interviews were coded three ways, once for WMCI classification, once for parental RF and once according to an original coding schedule (Appendix W). The WMCI classification was rated as follows: 0 for ‘balanced’ or secure, 1 for ‘disengaged’ and 2 for ‘distorted’.

To date no specific training for using the WMCI for parental RF coding exists, so researchers who have used the interview for this were contacted for advice, along with Charles Zeanah who was a co-creator of the WMCI and its protocol. It was agreed that the WMCI was suitable for parental RF coding, and recommendations for independent coding through the Anna Freud Center in London were given (D. Schechter, personal communication, 17th January 2019, F. Suardi, personal communication, 16th January 2019). Independent coding was performed on all WMCI transcripts by one coder at the Coding Consortium, and on half of all transcripts by a second coder at the same institution. All parental RF scores fell within 2 and 5 on an 11-point scale that goes from -1 to 9, and were entered as whole numbers.

5.7.1.5 Outcome data

Notifications were entered as whole numbers, and were coded as ‘1’ for having one or more notification during the eight months prior or subsequent to the assessment, and ‘0’ for having no notifications.

5.7.2 Data analysis

Data were analysed using the statistical programming language R and Excel, and raw data were imported from .csv files (R Core Team, 2018). Variables were created for each construct, measure or item of interest, totalling 66 variables. Because of the exploratory nature of the research, some of these variables were created following initial data analysis. For example, classifying participants' main concerns into the final categories was completed after compiling all 29 responses and identifying the most common answers.

5.7.2.1 Demographic and background information

Demographics of the final sample were summarised according to age, sex, ethnicity, age of the youngest child and total number of children in the family. Participants' background risk and protective factors were summarised based on examination of the interview notes, and percentages of the sample reporting these were calculated for each factor. The main concerns were defined based on responses, and these were plotted as a frequency graph. Schooling experiences, the onset of problems, reporting a good time in life, coping strategies and participant hopes and dreams were all summarised according to classification and several direct excerpts were described in prose for each variable.

5.7.2.2 Psychometric measures and researcher-rated measures

Means, ranges and standard deviations were calculated for each psychometric measure, and summed scores were plotted on frequency graphs where it was deemed useful. For the DAST-10 and the AUDIT, proportions of scores above and below conventional clinical cut-offs were calculated. Scale-scale and scale-total correlations for the DERS were calculated. PSOC scores were reported as totals and as sub-scales of parenting efficacy and parenting satisfaction. Self-report scores related to mood were classified according to severity category and graphed. Scores on the PFOCS were analysed further, with correlations calculated and Cronbach's alpha used to explore the scale's internal consistency, and weighted kappa scores

for measures with more than one rater. Means and standard deviations for each variable related to narrative quality were calculated.

5.7.2.3 Interview transcripts

Parental RF and WMCI relational representation classification scores were calculated as proportions of the sample. Parental RF scores were further classified into a new variable, 'lower' and 'higher' due to low variability within the sample, following receipt of the independently-coded scores. Inter-rater reliability scores were calculated for RF using the kappa statistic. WMCI alternative coding procedure scores were summarised in the same way as for the other psychometric measures, and mean scores for each item were also calculated and used as further independent variables.

5.7.2.4 Relationships between the dependent and independent variables

Notification data were classified into three variables: prior notifications, subsequent notification, and any notification during the 16-month period. Correlational relationships using Spearman's r were calculated for all independent variables, and summarised according to category. Correlations between plus or minus 0.1-0.3 are considered weak, 0.4-0.6 are considered moderate, and those above 0.70 are considered strong (Akoglu, 2018).

Independent variable relationships were likewise examined with particular reference to parental RF. Predictive relationships between independent and dependent variables were examined, with binary logistic regressions (odds ratios) calculated for each variable and grouped according to category, along with 95% confidence intervals. Inter-rater reliability was calculated using the kappa statistic, and interpreted according to McHugh (2012).

Data were analysed using RStudio (R Core Team, 2018). A t -distribution was assumed due to the small sample size. Using the quantile function in R to identify the end-points for 95% CIs yielded critical values of 2.06 for $n-1$, where the sample size was 26.

Logistic regression modelling was used separately for each independent variable to examine associations between them and subsequent, or any, notifications. Binomial distributions were assumed for all regressions regarding the dependent variables of interest (subsequent notifications, any notifications and parental RF).

5.7.2.5 Multivariable models

An approach for building a multivariable model was decided post-hoc. Linear discriminant analysis (LDA) was performed for all variables to identify those most salient, and expert judgement was used in deciding which of the variables yielded by the DFA should be retained. Variables of interest were then analysed via backwards step-wise logistic regression to determine the best model. This resulting model was tested for its predictive accuracy, with significance reported using chi-squares and p-values. For all statistics, an alpha level of .05 was used to determine significance.

Chapter 6

Participant Background and Psychosocial Measures

The purpose of this chapter is to describe the flow of participants, the final included participant sample and provide a descriptive summary of the data yielded from each measure. Although the various interview questions and other measures, including how they are coded, are described in Chapter 5, a truncated summary of each measure is included to assist the reader.

6.1 Participant flow

Rates of participation were low. Those referred to the study were estimated to be 10-21% of the sampling frame, the total number of which was estimated to be 200-400, based on reports of client numbers from NGOs. Forty-one referrals were received for the study. Of these, three potential participants were ineligible due to having had all of their children removed from their care. Four potential participants did not respond to emails or texts over several weeks of periodic contact from the researcher. Three potential participants responded initially and a first appointment was made but was cancelled, with all further attempts at contact unsuccessful. One potential participant was in a state of extreme distress at the time of the initial appointment, and was subsequently deemed ineligible due to not having her children in her care. One potential participant engaged in the initial appointment but chose not to participate in the study due to a conflicting work schedule. No participants withdrew their consent. Figure 5 shows the flow of initial referrals through to the final sample. Full datasets were collected for 26 participants, and partial data sets for 29 participants. Background interview information and outcome data were collected for all 29 participants, and the available data sample size are reported for each measure as they arise.

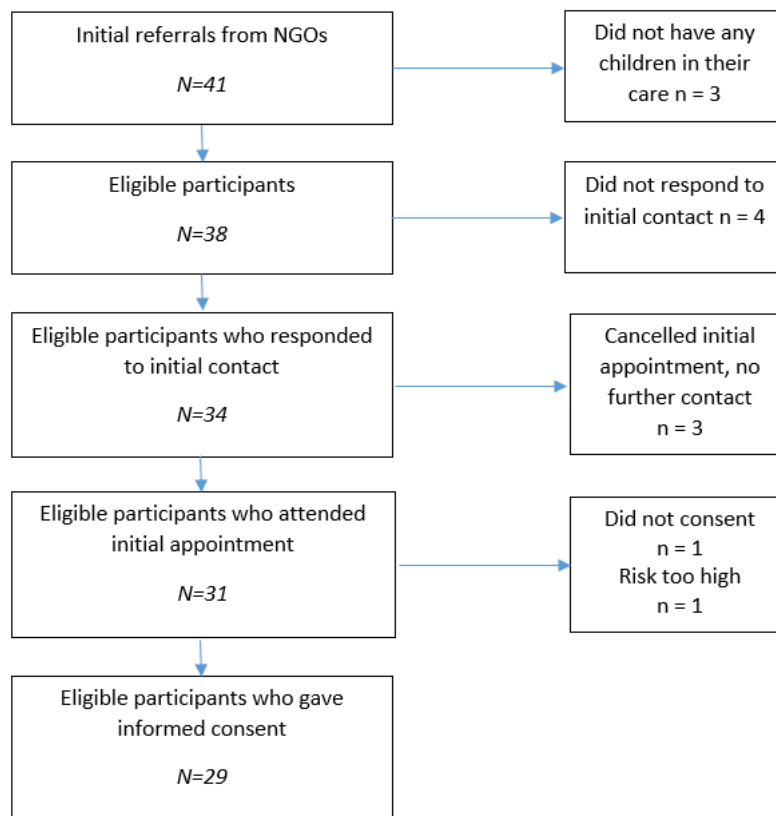


Figure 5 Participant flow

6.1.1 Recruitment issues

Recruitment progressed slowly, and follow-up visits and phone calls to the NGO services indicated that many staff members felt uncomfortable asking clients whether they would be interested in participating. Further questioning regarding this discomfort revealed that for many social workers and community workers, the relationship with the client felt tenuous. They believed that any further request on their part (to take part in research) would place undue pressure on the client-worker relationship, putting their own engagement with the client at stake – a risk they were unwilling to take. Those few staff members that did refer parents for the project, however, often referred more than one parent. Positive feedback, both written and verbal, was passed on to the researcher about the process of participating in the project for their clients.

Common concerns expressed by potential participants centred around the maintenance of confidentiality with regard to OT. Several participants clarified the researcher's independence from OT (i.e. not employed by them at the time of data collection) and asked whether the information given to the researcher could be accessed by OT. Participants were assured that the only information about them, given to OT's national office research arm, was their full name and date of birth. However, several participants expressed a belief that OT would be able to gain their information anyway.

6.1.2 Participant motivations in participating

On the whole, parents agreed to participate in the study for similar reasons that most people choose to participate in a research study: to play a part in furthering scientific knowledge. Many participants expressed concerns about the current OT system and its potential impact on children, and wanted to contribute their personal information as part of the quest to improve it. Parents were overwhelmingly interested in the outcomes and findings of the study, and all but a few indicated on their consent form that they wanted to receive a summary of these.

6.2 Sample characteristics: demographics, background information and main concerns

6.2.1 Sample demographics

Sample representativeness was unable to be estimated. The final sample consisted of 29 participants, 4 (14%) of whom were male and 25 (86%) were female ranging in age from 19 to 58 years at the time of baseline assessment ($M = 31.3$ years). Overall 16 (55%) of the participants reported their predominant ethnicity as NZ European or Pākehā, and 11 (38%) identified as Māori. Two participants identified other ethnic origins. The median age of the youngest child in the family was 13 months, with their ages ranging from 5 months to 10 years. Fourteen (48%) of the children were aged under 12 months. Most parents had one or

two children in total ($n = 21$; 72%), with the median being two. The remainder had three, four or five children ($n = 8$; 28%). Table 3 summarises the demographic data of all participants.

Table 3 Sample characteristics of participating parents (n=29)

	Number	(%)
<i>Age (Years)</i>		
18-24	7	(24)
25-34	15	(52)
35-44	4	(14)
>45	3	(10)
<i>Sex</i>		
Male	4	(14)
Female	25	(86)
<i>Ethnicity</i>		
NZ European/Pākehā	16	(55)
Māori	11	(38)
Other	2	(7)
<i>Age of youngest child (Months)</i>		
0-11	14	(48)
12-35	9	(31)
36-59	2	(7)
60+	4	(14)
<i>Number of children</i>		
1	8	(28)
2	13	(45)
3	4	(14)
4	2	(7)
5	2	(7)

6.2.2 Participants' self-reported background experiences

As described in the methods chapter, participants were asked a range of open-ended questions regarding their upbringing. No participant was specifically asked if they experienced any of the adversities or buffers described, but responses were coded where mentioned by the participant. Table 4 summarises a range of harmful experiences described by participants as occurring during childhood or adolescence, with the most common being physical abuse (reported by 20 (69%) parents), followed by sexual abuse and neglect (reported by 15 (52%) parents). Transience, OOHC and multiple caregivers were each reported by 12 (41%) parents.

Notably, more than a third ($n = 12$; 41%) of the parents had had an older child taken into OOHc care via OT (or, in the case of one parent, a parenting order). About two-thirds of the parents reported some kind of protective relationship during childhood ($n=19$, 66%). Thirty-eight percent of parents reported at least one suicide attempt or incident of serious self-harm at any time during upbringing or adulthood ($n = 11$). Overall, every parent reported at least one of the risk factors listed in Table 4, with a median of 4 risk factors from the 8 factors listed across the participant sample (range = 1-7).

Table 4 Participants' self-reported background factors (n=29)

	Number	(%)
<i>Maltreatment</i>		
One or more types abuse	28	(97)
Two or more types abuse	15	(52)
Three types abuse	5	(17)
<i>Background Risk Factors</i>		
Physical abuse	20	(69)
Sexual abuse	15	(52)
Neglect	14	(48)
Transience	12	(41)
Multiple caregivers	12	(41)
Out-of-home care, including whānau care	12	(41)
Older child removed	12	(41)
Suicide attempt or serious self-harm reported at any time	11	(38)
<i>Background Protective Factor</i>		
Protective relationship	19	(66)

6.2.3 Participants' main concerns

Participants were asked what their main concerns were at the time of assessment, and answers were coded for the following categories: experiencing conflict with partner or ex-partner, experiencing financial problems, having an ongoing court case, experiencing poor housing, and experiencing conflict with or describing stress from MCOT. Twelve (41%) participants reported no concerns at the time of assessment, 8 (28%) reported one concern, 6 (21%) reported two concerns, and the remaining 3 (10%) reported three or four of the

concerns listed. Table 5 shows the frequency of the main concerns reported by participants. The two most common concerns were experiencing financial problems, and conflict or stress from dealings with MCOT ($n = 9$; 31%, respectively). The next most common problem was an ongoing court case, which was reported by 5 (17%) participants, followed by conflict with a partner or ex-partner ($n = 4$; 14%) and poor housing ($n = 3$; 10%).

Table 5 Main concerns reported by participants (n=29)

	Number	(%)
Conflict with partner	4	(14)
Financial problems	9	(31)
Court case ongoing	5	(17)
Poor housing	3	(10)
Stress from MCOT	9	(31)
No concerns	12	(41)

6.3 Participants' personal backgrounds

6.3.1 Schooling

Participants were asked “How was school for you? How did you go academically?”

Responses were coded for the following categories: no answer, negative tone or disliked school, a mixed tone with some positive and some negative comments, and a positive tone or liked school. Two (7%) participants did not answer the question, 15 (52%) participants disliked school, 6 (21%) participants had a mixed experience of schooling and a further 6 (21%) participants had a positive experience or liked their schooling. An example of a response coded as “disliked school” is as follows: *“Not good. I shifted around a lot. Socially – I was picked on and bullied, I had no idea how to cope. When I was living with Mum, I did have some minor behaviour problems, that was due to the intellectual disabilities”* (participant 728). Several participants acknowledged both good and bad aspects of their schooling, such as:

“Mum used to bribe me to go to school. At (one primary school), I did really good at school. By high school, all the friend groups had changed and it was too hard to fit in.

After I started smoking pot I just sat down the back of the fields and was naughty in class...Maths I never understood but I loved writing. I used to write stories, poems, what I felt etc” (participant 717).

For some of the participants, school was a safe haven and they remembered it positively: *“I loved school. I was a bitch, had attitude. I would rather be there than at home. I never wanted to go home, school was a safe place...the earthquakes disrupted my schooling, they were traumatic. I passed NCEA Level 1 though [national qualification for 15-16 year old secondary school students]. I was cocky, I stayed in Year 12 but dropped out halfway through” (participant 732).*

6.3.2 Onset of problems

When describing their childhood experiences, participants were asked “When did things start to go wrong for you?” Responses were coded for the following categories: no answer, from birth or early childhood years, during childhood, during adolescence, or in adulthood. Of the 25 participants who provided answers, 5 (17%) identified early childhood or from birth as the beginning of their troubles, 10 (31%) identified childhood, 8 (28%) identified adolescence and 2 (7%) identified adulthood. Those who identified a very early beginning to their problems said things such as *“the day I was born” (participant 723), “right from the earliest I can remember” (participant 729) or “emotionally, when I was four, things started to go wrong. I can’t remember my life before that” (participant 708).* Most participants recalled a time in childhood when they believe that things went wrong: *“Nine years old – I started to get bullied and moved to Christchurch. I was a bit violent, a bit wayward” (participant 720), or “when I was seven I sat in the middle of the road and didn’t care if I died. My mum was taunting me” (participant 732).* Those who identified adolescence as the point in time when their problems began often described getting into trouble, getting hurt or using substances:

“When my parents separated, during my teen years, I started drinking at 13. I’d leave home and not come back, staying at friends’ houses. I got expelled from school... At 16 years I got kicked out. I was smoking pot and working the streets”
(participant 710).

There was a clear interaction between risky behaviour on the part of the participant and being harmed by other people or situations:

“At 14 [age of rape]. I wouldn’t walk down the street with my mum. I started drinking at 11 years old, it was just who I hung out with. I went riding in cars with boys, that led to the accident. The driver was stoned, and fell asleep at the wheel”
(participant 735).

6.3.3 A good time in life

Participants were asked to describe a good time in their lives, when things were going well for them. Responses were coded into the following categories: no answer or could not specify a time, a time during childhood or adolescence, a time during adulthood or when working, and the present. Eight (28%) participants either did not answer or said they could not think of a good time in their lives, 9 (31%) participants specified a time during their childhood or adolescence, another 9 (31%) specified a time during adulthood or when working and 3 (10%) participants reported that right now was a good time in their lives. Descriptions of good memories were sometimes specific, such as *“staying at Nana’s in (another town). She would have fresh bread every day, there was a lolly jar and an arts and sewing room, and the freezer was always full of ice cream”* (participant 726), or

“I remember from four to six years, we used to fill up bins with water. Mum would get angry then laugh, then get toys from the bathtub, we used to make mud pies. We had

watercress and eels, 'living in the white people's world too', as Mum used to say. She used to look up on the internet and bake cakes" (participant 728).

Some of those who specified adulthood mentioned working: *"working on a dairy farm, before I got pregnant"* (participant 735), or *"I was working at 18 years and had a stable-ish relationship, I had fun on the weekends"* (participant 724). Of those participants who specified now, or in adulthood, as being a good time, several mentioned their children as being a key part of that: *"when (child) was born. I was scared but we had a big FGC, they told me they'd give me a chance"* (participant 704), and *"having my kids, all the stages, watching them grown and change"* (participant 738).

6.3.5 Self-reported coping strategies

Participants were asked "How do you cope with tough times?" Responses were coded into the following categories: giving no answer or stating that they do not cope; saying something generic like "I just have to, I don't have a choice"; describing an unhelpful strategy such as substance use; describing a helpful strategy such as exercise, meditation or self-care; and describing a helpful and relational strategy like talking to a friend or relative. Of the 29 participants, 14 (48%) described a helpful strategy. Four (14%) participants described an unhelpful strategy, and 11 (38%) participants either did not answer or could not specify a specific coping strategy. Of those participants who specified a helpful strategy, several described still finding things very hard:

"I listen to music, space myself out. I don't cope with it if I do get into a low state. I bottle it up, then have a breakdown, I'd be sitting on the floor in tears. I have had suicide attempts in the past. If I were suicidal now, I would tell someone and put myself in (psychiatric hospital)" (participant 712), and

“I write in a book. It’s hard. I’ve been burned by two friends, I have anxiety and depression. I can’t work because I’m too scared” (participant 708). Focusing on and spending time with children, along with managing thinking patterns and talking to friends and family, were mentioned by several participants reflecting on their coping strategies: *“Pretty well. I focus on something, think about how important it is to me, think about it later, talk to (partner). I do have outbursts after bottling feelings up for a long time, but our kids don’t see it”* (participant 716), and *“seeing (daughter) every day. Just doing things together, like the paper run, doing the paper run together. She chatters away, going to the park”* (participant 713). Some responses were tinged with a fear of things going wrong, or not focused on the struggle to cope:

“I am so lucky to have (son) that’s why I protect him with everything I’ve got, trying to keep him. He gets me through. If he was taken, I’d top myself, it’s why I’m so careful, I’m terrified. I see a psychologist, see (parenting service), I’ve been to (stopping violence course), I haven’t had a drink since 2015” (participant 724), and *“I wasn’t coping when (daughter) was taken. I had suicidal thoughts. My Auntie helped, if it wasn’t for her I wouldn’t be here. I don’t know how I coped, it was so hard keeping it together for her”* (participant 729). Some participants were intentional about their substance use supporting their coping: *“I smoke pot. If I didn’t have that, I’d have gone loopy”* (participant 735), *“drugs – weed and that’s it...I have a quick joint. The doctor knows it helps”* (participant 733), and

“I drink and remove myself to cope, but I’ve cut right back on drinking. If you drink, you should be able to get up to your kids in the morning. I can’t let me fall apart because of the kids. I don’t want to lose them, I want to see my grandchildren” (participant 725).

There were others who said they coped, but were unclear about exactly how: *“I’m winging it. I didn’t know anything when I got the kids. It was sink or swim, there was no choice”* (participant 731), and *“I have to. I have three kids and I have to”* (participant 738).

6.3.6 Hopes and dreams for the future

Participants were asked about their hopes and dreams for the future, for themselves and their children. Responses were coded according to the following categories: no answer, specifying adult hopes only, specifying child hopes only, or specifying both adult and child hopes and dreams. Of the 29 participants, 4 (14%) gave no answer, 9 (31%) described hopes for themselves, 3 (10%) described hopes for their children, and 13 (45%) described hopes for both themselves and their children. Many of the parents wanted their children to have a good education and to do better than they themselves had done: *“for them to have an opportunity – 90% of people suffer from FOMO [fear of missing out]. I want them to go to school, get the right ethics, work hard, save and earn it”* (participant 719), *“turn out better than us (me and partner), to get an education. We are illiterate”* (participant 704), *“for my kids to do so much better than what I’ve done. Get qualifications, a good job, travel”* (participant 725), and:

“the best education, a private school. We are already saving...it’s not what many Māori get. I want him to see the world as not bad, but as caring and loving. I will let him choose his own future job choice, or college choice. It’s his choice. We feel like he’s got free will – it’s what he wants to do” (participant 728).

Some participants focused on the type of childhood they wanted their children to have: *“my promise to (son) is to put him first. For him to grow healthy and happy”* (participant 729), *“giving kids a great childhood that they’ll remember. I want to spend time with them, setting an example. I want to have a bit of money to do enjoyable things like Inflatable World and have parties for their birthdays”* (participant 721). Some of the adult hopes and dreams

focused on parenting, others on gaining a good job, a house or being able to travel: *“to own my own house, for me and my kids. Then travel the world!”* (participant 717), *“me – have a career, own my own home, have a decent car and a toy car”* (participant 720), *“be a mechanic, get a part-time job. I dream of it”* (participant 723), and *“I want to be that change in the world for my kids. I realised no one cared about me – not mum...I want to own my own home, have land and do some teaching. I love learning, especially biology”* (participant 732).

6.4 Participants’ Responses on Psychometric Measures

6.4.1 Self-reported drug use

The Drug Abuse Screening Tool 10-item (DAST-10) is a self-report screening measure for drug use during the 12 months prior to assessment, and the recommended cut-off score of three suggests substance dependence (Skinner, 1982). A score of zero indicates that the participant has used drugs at no point during the past 12 months, and higher scores indicated higher drug use. Twelve (41%) participants reported no drug use in the year prior, and 7 (26%) reported drug use suggesting drug dependence (see Figure 6). Participants overwhelmingly reported marijuana as their drug of choice, with only one participant reporting current methamphetamine and other drug use. The mean DAST-10 score was 1.4.

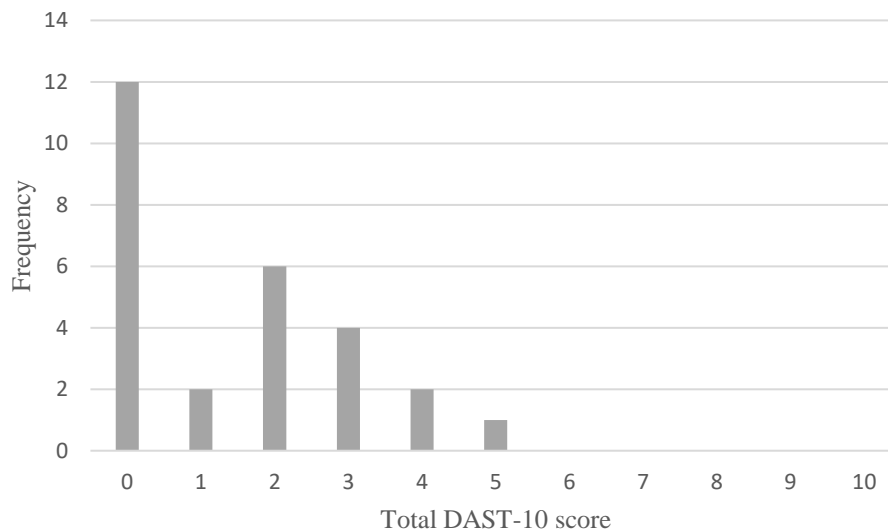


Figure 6 Distribution of DAST-10 scores (n=27)

6.4.2 Self-reported alcohol use

The Alcohol Use Disorders Identification Test (AUDIT) is a self-report screening questionnaire for alcohol use (Babor et al., 2001). While most questions refer to time periods only within the last 12 months, two items ask whether the participant has *ever* been injured or injured someone else as a result of their drinking, and whether a friend, family member or health professional has *ever* been concerned about their drinking (see Appendix 11). Therefore, it is possible that a participant could have engaged in no alcohol consumption during the 12 months prior to baseline assessment and have a total AUDIT score of 4. Higher scores indicate higher levels of alcohol consumption. Scores of eight or more are considered indicative of possible harmful alcohol use or alcohol dependence, scores from 16-19 indicate monitoring with brief treatment, and scores above 20 warrant more thorough assessment for a substance use disorder (Babor et al., 2001, p. 20). Figure 7 presents the frequency of total AUDIT scores. Ten participants (34%) self-reported alcohol use at levels indicating possible harmful use or dependence.

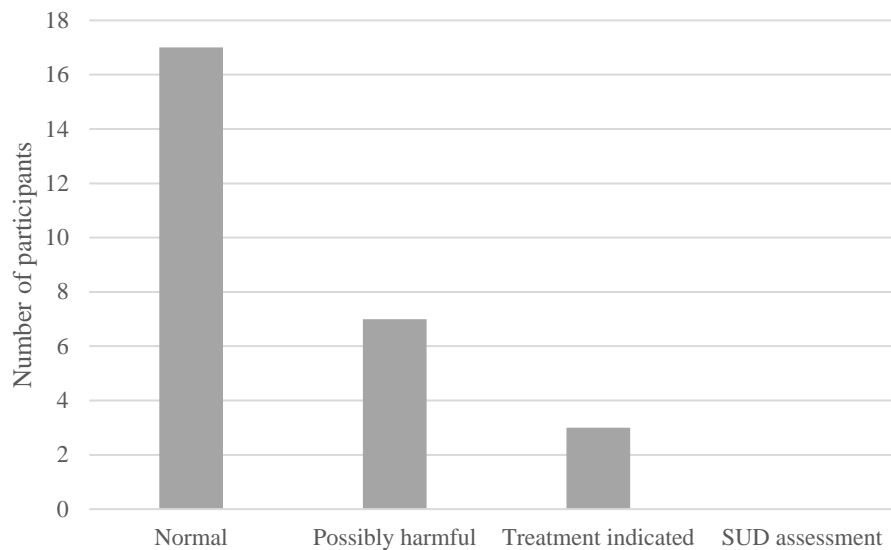


Figure 7 Distribution of AUDIT scores (n=27)

6.4.3 Self-reported emotional regulation difficulties

Emotional regulation was measured using the Difficulties in Emotional Regulation Scale (DERS, Gratz & Roemer, 2004). The DERS is a 36-item self-report questionnaire measuring six sub-scales of emotional regulation along with providing a total score. Higher scores indicate higher difficulties with emotional regulation. Item scores add to yield scale scores for the following areas: non-acceptance of emotional responses, difficulties engaging in goal-directed activities, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity. The mean total DERS score was 79.52 ($SD = 28.11$, 95% $CI = 68.40 - 90.64$), with a median of 85. Scores ranged from 37 to 147. Often, parents fell into a pattern of answering with or two main responses depending on whether the item was positively or negatively phrased. For example, there was one parent who answered “always” or “never” in the direction of having very high ability to self-regulate on all questions bar three, meaning that her score was very low. There appeared to be a discrepancy for some parents between their reported histories, and their behaviour during visits, and their item responses on the DERS.

As yet, no clinical cut-off scores are recommended or published, but Table 6 presents published total and scale means of a sample of 260 female US college students that were used in the DERS development and validation study, and means of a sample of 30 women with borderline personality disorder (BPD), alongside the means of the present population (Gratz et al., 2014; Gratz & Roemer, 2004). Overall, participants' self-reported emotional regulation, as measured by the DERS, is more similar to the general female college student population than the population of women with BPD (t-tests yielded two-tailed p -values of .73 and <.0001 for present study means compared to the college students and females with BPD, respectively; see Table 5).

Table 6 Total and scale score means of present study alongside previous studies of self-reported emotional regulation using the DERS

	Mean (<i>SD</i>) Present study n=29	Mean (<i>SD</i>) 260 female college students	Mean (<i>SD</i>) 30 females with BPD (TAU waitlist*)
DERS total	79.5 (28.1)	78.0 (20.7)	112.3 (25.3)
Non-acceptance of emotional responses	13.3 (6.5)	11.7 (4.7)	17.3 (6.6)
Difficulties engaging in goal-directed activities	12.3 (6.1)	14.4 (5.0)	17.3 (6.2)
Impulse control difficulties	11.4 (4.8)	10.8 (4.4)	17.5 (5.5)
Lack of emotional awareness	16.1 (5.8)	14.3 (4.6)	20.3 (4.8)
Limited access to emotion regulation strategies	16.1 (7.5)	16.2 (6.2)	24.8 (7.5)
Lack of emotional clarity	10.1 (5.2)	10.6 (3.8)	14.8 (3.7)

*Treatment As Usual sample from this study was used as the group for comparison here

Correlations were examined among sub-scale DERS scores with total DERS scores, with coefficients presented in Table 7.

Table 7 Correlations among DERS sub-scales and total DERS scores (n=27; Spearman's r)

	DERS total	Non-acceptance	Goal-directed	Impulse control	Awareness	Strategies	Clarity
DERS total	1.00						
Non-acceptance	0.90	1.00					
Goal-directed	0.85	0.80	1.00				
Impulse control	0.83	0.75	0.68	1.00			
Awareness	0.58	0.45	0.38	0.51	1.00		
Strategies	0.83	0.69	0.66	0.73	0.32	1.00	
Clarity	0.72	0.57	0.45	0.56	0.42	0.63	1.00

A moderate positive relationship was observed between the sub-scale “lack of emotional awareness” and total DERS scores, and strong positive relationships between all other subscales and total scores. Inter-scale associations for the Awareness sub-scale ranged from weak-moderate (0.32-0.51), and all other inter-scale associations ranged from moderate-strong (0.45-0.80).

6.4.4 Self-reported parenting self-efficacy and satisfaction

Parenting self-efficacy was measured using the Parenting Sense of Competence Scale (PSOC), which combines parents’ self-reported satisfaction and efficacy to yield a total score (Gibaud-Wallston & Wandersman, 1978; Johnston & Mash, 1989; Ohan et al., 2000).

Twenty-seven participants completed this 16-item questionnaire, and higher scores indicate higher levels of satisfaction and efficacy related to parenting. It became apparent with the first two participants that the first item in particular was poorly-worded and difficult to follow (“The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired”). Participants were confused and struggled to answer. This item appears to measure two separate ideas: that of understanding how one’s actions affects one’s child, and that of problem-solving in parenting. Participants were able to respond to the rest of the items with little apparent difficulty. The researcher

then began to introduce the scale in the same way, but then said something like “the first item is horribly-phrased and I apologise for that, but the rest are easier. Most people need to listen to it two or three times before they understand it.” The item was then re-phrased to something like “Solving problems with parenting is easy as long as you know how your actions affect your child”, and then there was a pause, and the researcher would add, “which I do”. This re-phrasing did not alter the content of the question, but the wording appeared to be more easily understandable and by orienting the participants to it being a difficult item before it was read, they paid closer attention to the wording.

Participants’ total, satisfaction and efficacy scores and summary statistics are presented in Table 8, alongside means of the normative sample presented by Johnston and Mash (1989, p. 172). Given the context of child protection problems, there were three items of particular note. Items 6, 10 and 15 all contribute to the efficacy score and relate to a person’s own estimation of their parenting ability: “I would make a fine model for a new parent to follow in order to learn what he/she would need to know in order to be a good parent” (item 6); “I meet my own personal expectations for expertise in caring for my child” (item 10); and “I honestly believe I have all the skills necessary to be a good mother/father to my child” (item 15). Out of 27 respondents, 24 (89%) responded with either mildly agree, agree or strongly agree to item 6. All but one participant (96%) responded with either mildly agree, agree or strongly agree to item 10, and 22 (82%) gave an agreement to item 15. All participants responded with some sort of agreement to at least one of the three key items, and all participants bar one responded with an agreement to at least two of the three key items. Subscale means along with normative means are summarised in Table 5. There were no significant differences between participants’ mean scores on the Satisfaction subscale and the group means in Mash and Johnston’s (1989) study (two-tailed $p = .51$ for boys and $p = .09$

for girls). Efficacy scores, however, were significantly higher among parents in this study than parents in the previous study (two-tailed $p < .0001$ for both boys and girls).

Table 8 Participants' self-reported PSOC sub-scale scores, with normative means for comparison (n=27)

	PSOC satisfaction	PSOC efficacy
Mean	36.4	32.8
<i>Mean (Mash & Johnston, 1989)*</i>	<i>38.1</i>	<i>25.4</i>
Median	36	33
Standard Deviation	7.33	4.30
Minimum	23	25
Maximum	53	42
Confidence interval (95%)	33.55 – 39.34	31.08 - 34.48

*Reported younger children's boys' and girls' means were combined to yield scores reported here (Mash & Johnston, 1989, p. 172)

6.4.5 Depression, Anxiety and Stress Scores (DASS)

Participants' levels of depression, anxiety and stress were measured using the DASS, a 42-item self-report psychometric that measures mood symptoms during the week prior to filling in the questionnaire (Lovibond & Lovibond, 1995). Scores can fall within the normal, mild, moderate, severe or extremely severe ranges for each mood state. Mean depression scores fell within the normal range (scores from 0-9 are considered normal), with 7 (27%) participants' answers yielding scores within the mild, moderate or severe ranges (Figure 10). Mean anxiety scores fell within the normal-mild range (scores from zero to seven are considered normal). Half of all anxiety scores fell within the normal range, and half fell within the mild, moderate, severe or extremely severe ranges ($n=26$; Figure 10). Mean stress scores fell within the normal range (scores from zero to 14 are considered normal). Half of all scores fell within the normal range, and half fell within the mild, moderate or severe ranges ($n=26$; Figure 8).

Most participants were familiar with this questionnaire, and completed it quickly and easily, with the exception of the first item (“I found myself getting upset by quite trivial things”). Many participants asked what the word “trivial” meant, so when the questionnaire was administered verbally, the researcher adjusted it to saying “I found myself getting upset by quite small, or trivial, things”.

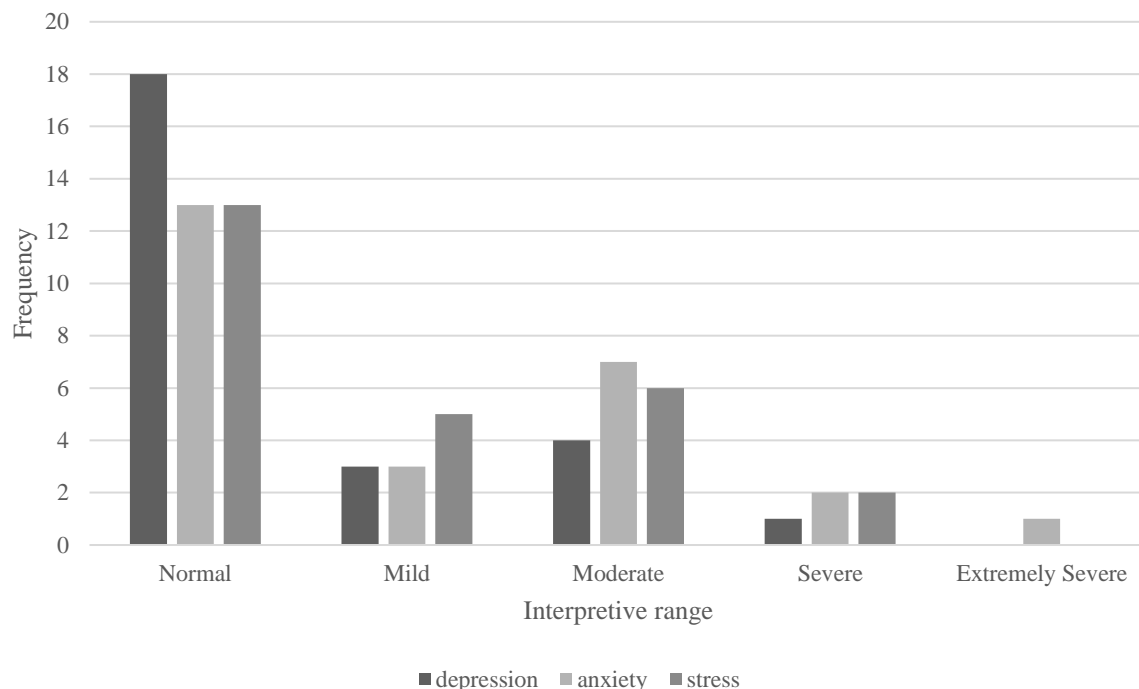


Figure 8 Frequency of interpretive ranges for depression, anxiety and stress

6.5 Researcher-rated measures

6.5.1 Parental focus on and attentiveness towards their child

The PFOCS aimed to measure participants’ awareness of their child’s emotional and physical state, their sense of responsibility for their child, and their observed or reported responsivity towards their child’s needs. The PFOCS was completed for all 29 participants. The mean

total PFOCS score was 22.4 ($SD = 5.15$, 95% $CI = 20.42 - 24.34$). The lowest score was 13 and the highest 32.

Item-level analysis was also completed for the PFOCS to examine sample means and standard deviations, as can be seen in Table 9. Each item was scored according to a five-point Likert scale. A score of three for item one, for example, means that there was a “mix of evidence suggesting inconsistent behaviours or attitudes towards their child” regarding a “parent monitoring their child’s behaviour to a degree appropriate for the child’s development”.

Table 9 PFOCS item means (n=29)

Item number and description	Mean (<i>SD</i>)
1. Parent monitors child’s behaviour to a degree appropriate for the child’s development	3.48 (0.81)
2. Parent’s conversational content indicates that they are always aware of where their child is and who is caring for them	3.31 (0.99)
3. Parent responds to child’s needs even when help is not requested	2.52 (1.10)
4. Parent acknowledges responsibility for ongoing care and protection of the child	3.41 (0.72)
5. Parent sees the current state of the child as the result of their own parenting	2.90 (0.99)
6. Parent takes action to ensure safety and wellbeing of child when needed	3.52 (0.72)
7. Parent thinks about and is concerned about their child’s wellbeing	3.24 (1.01)

Given that the PFOCS was developed for this study, item-total and inter-item correlation coefficients were calculated . Item-total correlations were strong and positive, ranging from 0.53-0.90, as were inter-item correlations which ranged from 0.19-0.77 (Table 10). While a full factor analysis of this scale is not appropriate due to its limited sample size, the moderate to strong item-total correlations suggest a unitary construct may have been captured (with the possible exception of item four). Internal consistency was examined using Cronbach’s alpha, yielding a raw score of 0.9 (95% CI 0.85-0.95), and a standardised alpha of 0.9. Item-rest correlations ranged from 0.42 (item 4) to 0.84 (item 3) with a mean of 0.71. This warrants further investigation examining the PFOC’s validity and reliability, with a larger sample of the population of interest.

Table 10 Item-total and inter-item correlations on the PFOCS (n=29)

	<i>Monitors</i>	<i>Aware</i>	<i>Responsive</i>	<i>Responsibility</i>	<i>Ownership</i>	<i>Action</i>	<i>Thought</i>
Monitors	1						
Aware	0.71	1					
Responsive	0.76	0.77	1				
Responsibility	0.19	0.35	0.38	1			
Ownership	0.57	0.52	0.58	0.44	1		
Action	0.69	0.60	0.70	0.45	0.55	1	
Thought	0.70	0.62	0.70	0.29	0.61	0.49	1
PFOCS Total	0.84	0.84	0.90	0.53	0.78	0.79	0.82

6.5.2 Parental representations of the parent-child relationship

Participants' representations of their child, and their relationship with their child, were examined using the WMCI. This 45-60 minute structured interview was administered with 26 participants and coded according to manualised instructions for one of three classifications of the parent's 'working model of the child': balanced, disengaged or distorted (traditional three-way coding).

During administration, parents regularly needed to be re-oriented to the question or topic at hand, but they were not interrupted or ever asked to stop talking about something. Due to this, some participants discussed many other areas of their lives not covered by the questions of the WMCI. Many participants struggled with particular questions and the most difficult question was "give me five words to describe your relationship with [your child], and I will ask you to give me a memory or an illustration for each word". Parents also had a hard time answering the question "what was your feeling when you saw [your baby] for the first time?", and the question "give me five words to describe [your child]'s personality, and for each word I will ask you to give me a memory or an illustration".

Over half of the participants' transcripts were classified as "distorted" ($n=15$, 58%), with under a quarter classified as "disengaged" ($n=6$, 23%) and just under one-fifth as

“balanced” ($n=5$, 19%). Table 11 presents the classifications of the current study alongside classifications from published studies of a non-clinical population, and mothers of infants referred to a mental health clinic specialising in care for families at risk for child abuse (Schechter et al., 2005; Vreeswijk et al., 2012). A chi-square test of independence was performed to examine the relationship between study membership and attachment representations. This was significant, and participants in this study were more likely to have representations characterised as distorted or disengaged than participants in the non-clinical population, χ^2 (14.2, $N=539$, $p=.0009$). When compared to participants in the study of referred, traumatised mothers, the groups were not independent χ^2 (0.05, $N=67$, $p=.973$). Thus the participants’ representations of the parent-child relationship in this study were more similar to mothers in the mental health clinic, and significantly different from parents in a non-clinical population.

Table 11 Parental representations of the parent-child relationship on the WMCI in current study, non-clinical population and referred, traumatised mothers

	Present study n (%)	Non-clinical population n (%)	Referred, traumatised mothers n (%)
Balanced	5 (19)	270 (53)	7 (17)
Disengaged	6 (23)	108 (21)	10 (24)
Distorted	15 (58)	135 (26)	24 (58)
Total	26	513	41

6.5.3 Parental representations of child – alternative coding procedure

Because three-way coding yields a blunt score, an original coding procedure was developed for use with the WMCI transcripts on several key questions (WMCI questions 2, 6, 7, 12 and 14; see methods chapter). The WMCI alternative coding procedure was applied to all 26 interview transcripts. The mean total WMCI: alternative coding score was 14.1 ($SD = 2.86$). The lowest score was nine and the highest 19.

Item-level analysis was also completed for the WMCI: alternative coding schedule to examine sample means and standard deviations, as can be seen in Table 11. Each item was scored according to a four-point Likert scale, with higher scores denoting more desirable parental representations or attitudes.

Table 12 Item-level means and standard deviations for the WMCI: alternative coding schedule (n=26)

Item number and description		Mean (SD)
WMCI2:	Does your baby or child get upset often?	2.96 (0.71)
WMCI6:	What about your child's behaviour now is the most difficult to handle?	3.12 (0.80)
WMCI7:	How would you describe your relationship to your child now?	2.73 (0.76)
WMCI12:	Tell a favourite story about your child.	3.27 (1.26)
WMCI14:	Are there any experiences which your child has had which you feel may have been a setback for him or her?	2.04 (1.06)

Given that the WMCI: alternative coding schedule was developed for the present study, item-total and inter-item correlation coefficients were examined for the sample. Item-total correlations were variable, ranging from 0.24-0.70, as were inter-item correlations which ranged from 0.00-0.70 (Table 13). Item-rest correlations ranged from -0.006 (WMCI7) to 0.48 (WMCI2) with a mean of 0.33. Cronbach's alpha was calculated to estimate the schedule's internal consistency, yielding a raw score of 0.55 (95% CI 0.3-0.79), and a standardised alpha of 0.55. This suggests poor internal consistency of the measure and does not warrant further exploration of the scale's psychometric properties.

Table 13 Item-level and item-total correlations for WMCI: alternative coding schedule
(*n*=26)

	WMCI2 (upset)	WMCI6 (difficult)	WMCI7 (relationship)	WMCI12 (story)	WMCI14 (setback)	WMCI alternative total score
WMCI2 (upset)	1.00					
WMCI6 (difficult)	0.34	1.00				
WMCI7 (relationship)	-0.11	0.02	1.00			
WMCI12 (story)	0.61	0.31	-0.03	1.00		
WMCI14 (setback)	0.16	0.41	0.00	0.10	1.00	
WMCI alternative total score	0.64	0.70	0.24	0.67	0.63	1.00

6.5.4 Parental reflective functioning

Twenty-six participants' WMCI interviews were coded for parental RF by one external rater, and 13 were coded by two external raters. The lowest score assigned was two, which was given to one transcript, and the highest scores were five ("definite or ordinary RF"), given to five transcripts. The mean parental RF was 3.58, which falls between a classification of "questionable or low RF" (a three), and "rudimentary or inexplicit mentalization" (a four). Figure 9 illustrates the distribution in the study's sample. A supplementary chapter describes examples of both WMCI representational categories and parental RF, see Appendix X.

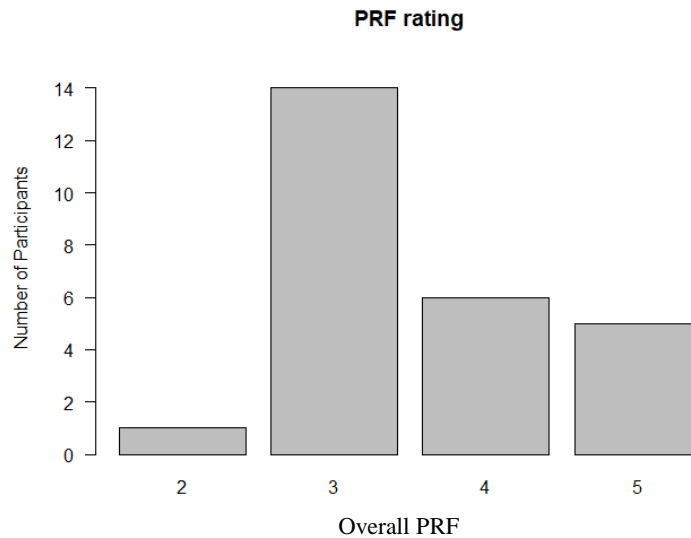


Figure 9 Frequency distribution of Parental Reflective Functioning

6.5.4.1 Inter-rater reliability for PRF scores

Inter-rater reliability was calculated regarding 13 randomly-selected transcripts coded by the two independent coders. Weighted kappa scores were 0.54 ($p = .001$), classified as ‘weak’ agreement (McHugh, 2012). Scores on the 13 double-coded transcripts are presented below.

In 62% of cases, parental RF scores were the same, and in 100% of cases, scores were within one point of each other on the 11-point scale (see Table 14).

Table 14 Parental RF scores double-coded

Participant	Coder 1	Coder 2
704	3	3
706	4	4
710	5	5
712	3	3
713	3	3
714	3	3
716	2	3
725	3	3
729	5	4
730	4	4
733	2	3
737	4	3
738	3	2

6.5.5 Quality of participants' narratives

Following the background interview, participants' narrative quality was rated along a six-point Likert scale by the researcher for six domains: fragmentation, stream of consciousness, insight, intrusion of memories, intensity of affect and presence of the child. Higher scores denote higher rates of evidence for the construct in question, but the domains 'insight' and 'presence of child' were reverse-scored so that *lower* scores indicated greater levels of insight and evidence for the parent thinking about and being preoccupied with their child. This was done so that lower scores consistently reflected more desirable qualities across all domains (where applicable: item 3.5 does not have a clear direction of desirability). Narrative quality scores are summarised in Table 15.

Table 15 Narrative quality means and standard deviations (n=29)

Item number and description	Mean (<i>SD</i>)
3.1 Fragmentation	3.07 (1.48)
3.2 Stream of consciousness	3.62 (1.67)
3.3 Insight	4.14 (1.43)
3.4 Intrusion of traumatic memories into narrative	3.38 (1.58)
3.5 Expressed emotionality/intensity of affect	3.69 (1.80)
3.6 Presence of child/children	4.31 (1.34)

Chapter 7

Prediction of Subsequent Maltreatment Notifications and Reflective Functioning:

Bivariable Associations and Regression Analyses

This chapter presents bivariable correlations (using Spearman's r) and regression analyses among the variables of interest and notifications of harm. Initially, raw outcome data are presented. Correlations among the independent variables are then examined and presented, followed by examination of the relationships between independent variables and the outcome variables.

The nature of the study and the resulting small sample size means that data analysis follows an exploratory approach. Thus the primary focus is on effect size estimates along with 95% confidence intervals (CIs), where appropriate.

7.1 Notifications of concern: the dependent variable

All of the participants were identifiable within the OT database, and all of the participants had children that were known to be linked to them. Notification data are summarised in Table 16. Out of the 29 participants, 17 had at least one notification over the 16-month period of time, and the average number of notifications across all participants was 1.45. Thirteen parents had at least one notification during the eight months prior to the assessment, and nine parents had at least one notification in the eight months following the assessment.

Table 16 Distribution of prior, subsequent, and total notifications of harm (n=29)

	8 months prior to assessment	8 months following assessment	Over 16-month period
Notifications	n (%)	n (%)	n (%)
0	16 (55)	20 (69)	12 (41)
1	4 (14)	7 (24)	5 (17)
2	5 (17)	0	6 (21)
3	3 (10)	0	3 (10)
≥4	1 (3)	2 (7)	3 (10)
Total notifications	27	15	42
Median	0	0	1

7.2 Relationships between independent variables

7.2.1 Relationships between psychosocial background variables

Relationships between background factors are summarised in Table 17. There were moderate positive relationships between participants reporting neglect and transience, and between transience and having multiple caregivers, and between having multiple caregivers and being in out-of-home-care (as would be expected). There was a moderate negative correlation between transience and having multiple caregivers, and having had an older child removed. A weak negative relationship ($r=-0.37$) was observed between being in OOHC and reporting a suicide attempt or serious self-harm. Reporting having had a protective relationship during childhood was moderately, and negatively, associated with experiencing transience and, weakly, reporting neglect.

Table 17 Relationships between background factors (n=29)

	Physical abuse	Sexual abuse	Neglect	Transience	Multiple caregivers	OOHC	Older child removed	Protective rel'ship
Physical abuse								
Sexual abuse	-0.20							
Neglect	0.05	0.10						
Transience	0.11	0.39	0.59					
Multiple caregivers	0.26	0.11	0.17	0.43				
OOHC	0.11	-0.03	0.03	0.15	0.57			
Older child removed	-0.04	-0.17	-0.11	-0.42	-0.42	0.00		
Protective rel'ship	-0.02	-0.12	-0.32	-0.42	-0.13	0.02	-0.13	
Suicide/self-harm	-0.24	0.19	0.10	0.06	-0.08	-0.37	-0.08	-0.33

7.2.2 Relationships between psychosocial and parenting data

There were strong positive relationships among ratings on several self-reported measures, as would be expected (see Table 18). Depression and anxiety were strongly and negatively related to parenting sense of competence, and stress was negatively related to parenting sense

of competence. Drug and alcohol use were moderately correlated, but substance use was not related to any of the other self-report measures. Parents reporting greater symptoms of anxiety were more likely to also have scores suggesting increased difficulties in emotional regulation. High scores on the DERS was moderately negatively associated with parenting competence scores. Overall, parents' scores on mood-related measures were logically related to parents' scores on their own sense of competence, in that increases in symptoms of depression, anxiety or stress, or general emotional regulation difficulties, were related to decreases in participants' sense of parenting competence.

Table 18 Correlations among self-report psychometric measures (n=26)

	Drug Use	Alcohol Use	Difficulties in Emotional Regulation	Parenting Sense of Competence	Depression	Anxiety
Drug Use	1					
Alcohol Use	0.61	1				
Difficulties in Emotional Regulation	-0.24	0.06	1			
Parenting Sense of Competence	0.20	-0.17	-0.62	1		
Depression	-0.09	0.08	0.68	-0.70	1	
Anxiety	-0.04	0.29	0.78	-0.76	0.78	1
Stress	-0.09	0.25	0.68	-0.63	0.77	0.74

7.2.3 Background experiences and psychometric scores

Relationships between psychometric scores and self-reported background experiences were analysed and are summarised in Table 19. There was a moderate positive relationship between reported sexual abuse and drug use, as expected, and likewise, but weaker, for alcohol use. There was a weak negative relationship between sexual abuse and scores on the researcher-rated Parental Focus on the Child Scale (PFOCS). Parents who had reported

growing up with multiple caregivers were slightly more likely to score higher on the PFOCs, although this correlation was not present for those who were transient and those who experienced OOHC. For those participants who had had an older child removed from their care, there was a weak negative relationship between drug and alcohol use, and weak positive relationships between depression and stress. They were also slightly more likely to score poorly on the PFOCs, whereas there was a weak positive relationship between those reporting having a protective relationship with an adult and PFOCs scores. Reporting a history of suicide or serious self harm was weakly, and positively, associated with higher drug and alcohol use scores, and had a moderately negative relationship with PFOCs scores. Put another way, participants self-reporting suicidality were slightly more likely to also report using substances, and less likely to display behaviours that indicated a sense of responsibility for their child.

Table 19 Relationships between background experiences and psychometric scores (n=26)

	Physical abuse	Sexual abuse	Neglect	Transience	Multiple caregivers	OOHC	Older child removed	Protective rel' ship	Suicide/self-harm
Drug Use	-0.13	0.46	0.16	0.24	0.24	-0.24	-0.35	-0.24	0.31
Alcohol Use	-0.06	0.28	0.12	0.22	0.12	-0.33	-0.33	-0.16	0.26
Difficulties in Em.Regulation	0.18	-0.10	-0.15	-0.09	-0.16	-0.15	0.20	0.08	0.11
Parenting Sense of Competence	0.27	-0.03	0.18	0.18	0.24	0.24	-0.18	-0.24	-0.21
Depression	0.16	0.14	-0.14	-0.19	-0.21	-0.19	0.29	0.19	0.12
Anxiety	0.09	0.04	-0.02	0.00	-0.02	-0.06	0.10	0.20	0.12
Stress	0.10	-0.03	-0.16	-0.15	-0.19	-0.01	0.29	0.06	0.13
Parental Focus on Child	0.04	-0.28	0.11	-0.06	0.25	0.03	-0.28	0.24	-0.41

7.2.4 Relationships between parental representations, focus, reflective functioning and narrative quality

Relationships between participants' narrative quality, reflective functioning, WMCI classification and WMCI alternative coding were examined and are summarised in Table 20. Moderate positive correlations were found between the alternative coding procedure on the WMCI and parental focus on their child. There was a moderate negative correlation between the 'presence of the child' during the background interview and the alternative coding procedure on the WMCI and PFOCS scores (n.b. 'presence of child' items were reverse-scored, indicating that those who referred to their children more during the background interview also scored more highly on the WMCI alternative coding schedule). Total number of background risk factors was moderately and positively correlated with two aspects of narrative quality, 'stream of consciousness' and 'intrusion of memories'. Parental reflective functioning was also weakly and positively associated with PFOCS score, and moderately associated with the WMCI alternative coding schedule.

Table 20 Relationships between parental representations, PRF and narrative quality (n=26)

	Parental focus on child	WMCI alternative	PRF	Background risk total
Parental Focus on Child	-			
WMCI alternative	0.41	-		
PRF	0.31	0.48	-	
Background risk total	-0.14	0.01	-0.08	-
Fragmentation	-0.37	-0.17	-0.06	0.35
Stream of consciousness	-0.36	-0.08	-0.23	0.48
Insight	-0.53	-0.31	-0.24	-0.15
Intrusion of memories	-0.26	0.10	0.06	0.57
Intensity of affect	-0.03	0.31	0.17	0.16
Presence of child	-0.65	-0.45	0.05	-0.24
WMCI classification	-0.37	-0.26	0.02	0.20

7.3 Background experiences as predictors of reflective functioning

Background experiences were analysed as predictors of parental RF. RF scores were classified as either low (parental RF = 2-3) or medium (parental RF = 4-5), to enable binomial logistic regression with dichotomised parental RF as the variable of interest (see Table 21). Two variables showed large effect sizes lowering the odds of having medium parental RF, physical abuse and being placed in OOHC, but these were non-significant. Having a self-reported history of suicide attempts or serious self-harm was predictive of medium parental RF with a small effect size, but this was also non-significant ($OR = 1.67$; 95% $CI = 0.31-8.96$). Among the participants in the study, none of the background variables examined were significantly predictive of medium parental RF.

Table 21 Background experiences as predictors of PRF (n=26)

	Variable with Parental RF (medium)		
	Freq (n/26)	OR	95% CI
Physical abuse	17	0.44	0.08-2.47
Sexual abuse	14	1.05	0.20-5.42
Neglect	12	1.37	0.27-7.08
Transience	11	1.25	0.24-6.54
Multiple caregivers	12	0.95	0.18-4.91
OOHC	12	0.25	0.04-1.46
Older child removed	10	0.86	0.16-4.63
Protective rel'ship	17	0.88	0.16-4.86
Suicide/self-harm	10	1.67	0.31-8.96

7.4 Psychometrics, parental reflective functioning and parental representations: correlations and regression analyses

Psychometric scores and the WMCI alternative coding schedule were analysed as predictors of low or medium parental RF (see Table 22), and means were compared across the two groups using the Mann-Whitney U-test. All results yielded OR s in the expected direction (increasing or decreasing the odds) bar drug use, where increased reported drug use predicted

medium parental RF, but this was non-significant. All *ORs* were small and non-significant bar the WMCI alternative coding schedule, which yielded an *OR* of 1.57 (95% *CI* = 1.04-2.36), with higher scores increasing the log odds for a medium parental RF score. On average, participants with medium parental RF had anxiety and stress scores within the normal range, whereas participants with low parental RF had anxiety and stress scores within the mildly elevated range. Depression scores were 3.31 points higher among participants with low parental RF. Notably, none of the self-report ratings significantly predicted parental RF – the two measures with the lowest *p*-value were both researcher-rated.

Table 22 Co-predictors of WMCI classification and parental RF (n=26)

	Variable with PRF (medium)				
	Mean: low PRF	Mean: medium PRF	<i>OR</i>	95% <i>CI</i>	Mann-Whitney U test <i>p</i> -value
Drug Use	1.33	1.73	1.18	0.69-2.03	.70
Alcohol Use	7.33	5.55	0.94	0.81-1.10	.44
Difficulties in Emotional Regulation	80.33	72.27	0.99	0.95-1.02	.39
Parenting Sense of Competence	67.4	72.55	1.06	0.00-1.17	.21
Depression	8.13	4.82	0.92	0.80-1.06	.24
Anxiety	9.13	5.36	0.89	0.76-1.05	.15
Stress	16.47	9.18	0.91	0.82-1.01	.08
Parental Focus on Child	20.93	25.18	1.20	0.99-1.47	.05
WMCI alternative	12.93	15.73	1.57	1.04-2.36	.02

7.5 Relationships between dependent and independent variables

Correlations were calculated between psychosocial and background measures and the outcome variables. These dependent variables were notifications of harm made during the eight months following the assessment, or at any time during eight months prior to the assessment *and* following the assessment (16 months). Predictive relationships between variables of interest and outcome data were also examined and are presented in this section.

7.5.1 Relationships between independent and dependent variables

Table 23 summarises the correlations between demographic factors and subsequent, or any, notifications. The only demographic factor associated with having a subsequent notification was having more children ($r = 0.50$). Child age and parent age were weakly correlated, and as expected, having more children was moderately associated with having an older parent. Parent ethnicity and sex were not meaningfully associated with any other factors.

Table 23 Relationships between demographic factors and notifications (n = 29)

	Parent's age	Child's age	No. of children	Parent ethnicity	Parent sex	Subsequent ROC
Parent's age						
Child's age	0.30					
No. of children	0.50	0.22				
Parent ethnicity	0.10	-0.19	0.12			
Parent sex	0.37	0.17	0.17	0.01		
Subsequent ROC	0.05	-0.07	0.50	0.16	0.16	
Any ROC	-0.10	-0.26	0.29	-0.03	-0.07	0.56

7.5.2 Participant demographics and subsequent notifications

Odds ratios between demographic variables and subsequent, and any, notifications are presented in Table 24. There was no relationship between parent or child age and subsequent, or any, notifications, but on average children whose parents received any ROCs during the 16 month period were 16.8 months younger than those who did not. Confidence intervals were narrow for these. Total number of children was significantly predictive of subsequent notifications with an OR of 2.7, but with any ROC this dropped to 1.8 and was non-significant. As expected, parent gender was not associated with subsequent, or any, notification, and confidence intervals were very wide.

Table 24 Demographics and notifications (n=29)

	Variable with subsequent notification				Variable with any notification			
	Mean or Freq no ROC (n/N)	Mean or Freq ROC (n/N)	OR	95% CI	Mean or Freq no ROC (n/N)	Mean or Freq ROC (n/N)	OR	95% CI
Parent age (years)	30.6	33.1	1.03	0.94-1.13	31.2	31.5	1.00	0.92- 1.10
Child age (months)	26.7	22.9	0.99	0.96-1.03	35.4	18.6	0.98	0.94- 1.01
No. of children	1.9	3	2.7	1.06-6.87	1.8	2.5	1.8	0.77- 4.24

7.5.3 Background experiences and subsequent notifications

Among the background factors, predictive relationships with notification outcome were almost non-existent (see Table 25). Only one variable, parent reporting experiencing neglect, significantly predicted a subsequent notification, with an *OR* of 6.5 and a very wide confidence interval with its lower limit just above 1. This effect remained strong when examined in relation to any notification occurring in the 16-month period with an *OR* of 2.86, but was non-significant. One other variable showed a large *OR*, parent reporting physical abuse, with 5.5 times increased likelihood of a subsequent notification. Yet these reduced when used as a predictor for any notification occurring, and were non-significant. All other variables showed weak correlations with outcomes, and yielded small effect sizes: parent reporting experiencing sexual abuse, having multiple caregivers, being in out-of-home-care, having had an older child removed, reporting a protective relationship, and reporting a suicide attempt. In summary, this study did not identify any individual background risk factors, barring perhaps physical abuse and neglect, that were strongly associated with or predictive of notifications. Cumulative reported background experiences did not differ significantly between those who had a subsequent, or any, notification and those participants with no notification.

Table 25 Background experiences as predictors for subsequent ROCs (n=29)

	Variable with subsequent notification			
	Freq (n/20(%)) No ROC	Freq (n/9(%)) ROC	OR	95% CI
Physical abuse	15 (75)	5 (56)	5.33	0.49-57.55
Sexual abuse	9 (45)	6 (67)	0.65	0.12-3.45
Neglect	7 (35)	7 (78)	6.50	1.05-40.3
Transience	8 (40)	4 (44)	2.32	0.43-12.53
Multiple caregivers	9 (45)	3 (33)	1.20	0.23-6.38
OOHC incl. whānau	7 (35)	5 (56)	1.20	0.23-6.38
Older child removed	7 (35)	5 (56)	0.61	0.11-3.43
Protective rel'ship	13 (65)	6 (67)	1.08	0.19-6.18
Suicide attempt	9 (45)	2 (22)	0.75	0.13-4.25
<i>Total mean background risk factors</i>	<i>3.55</i>	<i>4.11</i>	<i>1.34</i>	<i>0.78-2.30</i>
	Variable with any notification			
	Freq (n/12(%)) or mean No ROC	Freq (n/17(%)) or mean ROC	OR	95% CI
Physical abuse	11 (92)	9 (53)	4.67	0.80-27.39
Sexual abuse	5 (42)	10 (59)	0.35	0.07-1.77
Neglect	0	14 (82)	2.86	0.57-14.43
Transience	2 (17)	10 (59)	1.78	0.36-8.90
Multiple caregivers	4 (33)	8 (47)	0.98	0.20-4.74
OOHC incl. whānau	4 (33)	8 (47)	0.55	0.11-2.66
Older child removed	4 (33)	8 (47)	0.55	0.11-2.66
Protective rel'ship	10 (83)	9 (53)	0.92	0.18-4.72
Suicide attempt	3 (25)	8 (47)	0.76	0.15-3.77
<i>Total mean background risk factors</i>	<i>3.67</i>	<i>3.76</i>	<i>1.04</i>	<i>0.64-1.69</i>

7.5.4 Participants' narratives and subsequent notifications

Narratives regarding participants' present and past experiences were examined for correlations with subsequent notifications. Participants' descriptions of a good time in life, how much they enjoyed school, whether they had a coping strategy, what their hopes and dreams for their future were and when they pinpointed the onset of their problems were not significantly associated with a subsequent, or any, notification (see Table 26). A weak, positive relationship was found between a neutral or positive attitude towards school and

having any notification during the 16-month time period. A further weak, positive relationships was found between identifying an adaptive coping strategy and describing an older age for the onset of problems. No further examinations for predictive relationships are presented due to the lack of association between these variables and the outcome of interest.

Table 26 Narratives of past and present experiences and subsequent notifications (n = 29)

	Good time	Schooling	Onset prob	Coping	Hopes/dreams	Subsequent ROC
Good time						
Schooling	0.1					
Onset prob	0.09	0.28				
Coping	0.11	0.15	0.31			
Hopes/dreams	-0.07	-0.07	-0.08	-0.01		
Subsequent ROC	0.12	0.06	-0.03	-0.11	-0.12	
Any ROC	-0.01	0.28	0.01	-0.17	-0.04	0.56

7.5.5 Main concerns and notification status

Relationships between participants' reported main concerns at the time of the assessment and subsequent, or any, notification and are summarised in Table 26. None of the concerns were significantly associated with maltreatment notifications, either subsequently or any time during the 16-month period. There was a weak positive relationship between having poor housing and having received any notification. As would be expected, there were also weak positive relationships between reporting conflict with a partner and having financial problems or an ongoing court case. No further examination for predictive relationships are presented due to the lack of significant association between these variables and the outcome of interest.

Table 27 Reported main concerns and ROCs (n=29)

	Conflict partner	Financial probs	Court case	Poor housing	Conflict CPS
Conflict partner					
Financial probs	0.38				
Court case	0.35	0.29			
Poor housing	0.19	0.26	-0.16		
Conflict CPS	0.16	-0.13	0.09	0.02	
ROC.sub.bin	-0.27	-0.13	0.09	0.02	-0.13
ROC.any	0.13	-0.04	0.01	0.29	0.11

7.5.6 Psychometric scores and notification status

Psychometric scores were examined as predictors of subsequent or any notifications for the 26 participants who completed all measures. Among most of the self-report psychometric scores, means were similar for parents who had a subsequent, or any, ROC and those had none (see Table 28). No scores were a strong predictor for subsequent, or any, notifications. Among those with a subsequent notification, mean scores on the Efficacy scale of the Parenting Sense of Competence Scale were three points higher among those with a ROC in the eight months following the assessment; average self-reported sense of parenting efficacy was slightly higher among those who had any ROC than those who had none. Satisfaction scores were very similar among the two groups. Scores on the DERS were higher among those with no ROC in the eight months following assessment, but lower among those who had no ROC in the whole 16-month period – suggesting no relationship in any specific direction with self-reported DERS scores and notifications of harm. Among parents with any ROC, self-reported drug use scores were slightly higher, on average.

Table 28 Psychometric measures as predictors of subsequent, or any notifications (n=26)

	Variable with subsequent notification			
	Mean score No ROC	Mean score ROC	OR	95% CI
Drug Use	1.4	1.4	1.0	0.58-1.74
Alcohol Use	6.8	6.4	0.99	0.85-1.15
Difficulties in Emotional Regulation	82.28	74.18	0.99	0.96-1.02
Parenting Sense of Competence (Efficacy)	68.4 (31)	71.2 (34)	1.03 (1.14)	0.94-1.13 (0.94-1.38)
Depression	7.1	6.0	0.97	0.86-1.11
Anxiety	7.2	8.1	1.02	0.90-1.16
Stress	13.2	13.8	1.01	0.92-1.10
Parental Focus on Child	22.4	22.3	1.00	0.85-1.17
	Variable with any notification			
	Mean score No ROC	Mean score ROC	OR	95% CI
Drug Use	1.3	1.6	1.14	0.66-1.95
Alcohol Use	7.0	6.4	0.98	0.85-1.13
Difficulties in Emotional Regulation	69	86.8	1.03	0.99-1.06
Parenting Sense of Competence (Efficacy)	69.1 (31.9)	69.5 (34.4)	1.01 (1.18)	0.92-1.10 (0.97-1.43)
Depression	7.3	6.3	0.98	0.87-1.11
Anxiety	7.0	7.9	1.02	0.90-1.17
Stress	13.6	13.2	0.99	0.91-1.09
Parental Focus on Child	22.1	22.6	1.02	0.87-1.19

7.5.7 Parental reflective functioning, WMCI classification and notification status

Scores for parental reflective functioning, WMCI classification and the WMCI alternative coding schedule were examined as predictors for notifications either subsequently or at any time in the 16-month period. None of the constructs were a significant predictor of notifications among the participants in the study, although all measures yielded *ORs* in the expected direction. Specifically, mean parental RF scores were very similar among the groups with respect to notification status. Directionality suggesting an effect among parents' representations of the relationships with regard to subsequent notifications was reversed when examined as a predictor for any notification during the elapsed time. Given the static nature of the construct, this strongly suggests no predictive relationship between parental

representations and harm among the study sample. The WMCI alternative coding schedule showed a small, non-significant effect, with higher scores being predictive of lowered log odds of subsequent, and any, notification (see Table 29).

Table 29 Parental representations, parental RF and the WMCI alternative coding as predictors of notification status (n=26)

Variable with subsequent notification				
	Freq (n/20(%)) No ROC	Freq (n/9(%)) ROC	OR	95% CI
PRF	3.59	3.56	0.95	0.35-2.63
WMCI: balanced	4	2	0.50	0.08-2.98
WMCI: disengaged	4	3	1.50	0.14-16.19
WMCI: distorted	9	4	0.89	0.10-7.80
WMCI alternative	14.6	13.2	0.84	0.61-1.15
Variable with any notification				
	Freq (n/12(%)) or mean No ROC	Freq (n/17(%)) or mean ROC	OR	95% CI
PRF	3.55	3.60	1.08	0.41-2.87
WMCI: balanced	2	4	2.00	0.34-11.91
WMCI: disengaged	3	4	0.67	0.06-7.19
WMCI: distorted	6	7	0.58	0.07-4.86
WMCI alternative	14.6	13.7	0.89	0.66-1.20

7.5.8 Item-level analyses: WMCI alternative coding schedule

Given the scale's possible relationship to parental RF and notifications, individual item ratings were examined as predictors for subsequent or any notifications, and for low or medium parental RF (see Tables 30 and 31). The item of most interest was item two, based on participants' answers to a question about their child becoming upset or hurt. Higher ratings on this (indicating greater emotional awareness in self and child) were associated with odds for a subsequent, or any, notification but this was non-significant. Higher ratings on

WMCI item 7 yielded higher odds of a subsequent notification, but this reversed when examined as a predictor for any notification, suggesting no consistent relationship among the study's participants. All items on the WMCI alternative coding schedule yielded higher means for participants with medium parental RF and with no ROCs either subsequently or at all, although the differences were small. Items 2 and 6 yielded large *ORs* when examined as predictors of RF, but these were not significant. In summary, the nature of a parent's response to the WMCI item 2 may be predictive of both notification status and parental RF, with higher ratings associated with lowered odds of a notification, and increased odds of having medium RF.

Table 30 WMCI alternative coding items as predictors of notification status (n=26)

	Variable with subsequent notification			
	Mean No ROC	Mean ROC	<i>OR</i>	95% CI
WMCI2	3.12	2.67	0.38	0.10-1.45
WMCI6	3.12	3.11	0.99	0.34-2.86
WMCI7	2.65	2.89	1.53	0.48-4.82
WMCI12	3.59	2.67	0.57	0.28-1.13
WMCI14	2.12	1.89	0.81	0.35-1.86
	Variable with any notification			
	Mean No ROC	Mean ROC	<i>OR</i>	95% CI
WMCI2	3.18	2.80	0.45	0.13-1.56
WMCI6	3.09	3.13	1.06	0.38-2.97
WMCI7	2.82	2.67	0.77	0.26-2.28
WMCI12	3.36	3.20	0.90	0.46-1.75
WMCI14	2.18	1.93	0.80	0.37-1.74

Table 31 WMCI alternative coding items as predictors of medium parental RF (n=26)

	Variable with PRF (low or med)			
	Mean Low PRF	Mean Med PRF	Odds ratio – logistic regression	95% Confidence Interval
WMCI2	2.8	3.18	2.24	0.64-7.81
WMCI6	2.86	3.45	2.74	0.85-8.87
WMCI7	2.67	2.82	1.30	0.44-3.85
WMCI12	2.73	4.00	n/a*	n/a*
WMCI14	1.87	2.27	1.44	0.65-3.19

*Odds incalculable as all participants with medium PRF also scored a rating of '4', the top rating, on that item

7.6 Predicting subsequent notifications

One further analysis was conducted in order to establish any potential predictive value of any of the variables. Firstly, linear discriminant analysis (LDA) was performed for all dependent variables to establish associations with having a subsequent notification. It is acknowledged that some assumptions of LDA were violated in this analysis: sample size was small relative to the number of variables; independent variables were not necessarily normally distributed at each level; variances among group variables were non-homogenous; and, participants were not randomly sampled, nor were variable scores independent (Büyüköztürk & Çokluk-Bökeoğlu, 2008). LDA output values ranged from 0.00-0.89 (see Table 32). Those with a coefficient of greater than 0.1 were examined for whether they may be reasonable to include into a summary score and 8 variables were identified as possible predictors. Gender was excluded, for example, as although it yielded a large coefficient this was not practically useful for classifying future risk for subsequent maltreatment in individuals. The remaining variables encompassed both demographic and background factors along with more psychodynamic factors such as ratings on parental relational representations and narrative quality.

Table 32 Linear discriminant analysis coefficients

Variable	LDA coefficient	Variable	LDA coefficient
DERS total	-0.00	Stream of Consciousness	0.06
PSOC satisfaction	-0.00	OOHC incl. whānau	0.06
Parent age	-0.00	Older child removed	0.06
Child age	0.00	Parent ethnicity	-0.07
PFOCS total	0.00	Coping strategies	0.08
Anxiety	-0.00	Schooling experience	0.09
Stress	-0.01	Drug use	0.09
Alcohol use	0.01	Insight	-0.11
Depression	0.01	Transience	-0.11
Suicide attempt	0.02	Intrusion of memories	0.12
PSOC total	0.02	Conflict with partner	0.13
Presence of child	0.02	Financial problems	-0.14
Onset of problems	-0.02	Prior notification	0.14
Intensity of affect	0.02	WMCI2	0.16
PRF	0.03	Sexual abuse history	0.19
Good time in life	0.03	WMCI7	0.19
Court case ongoing	0.03	Fragmentation	0.21
Conflict with OT	0.04	Physical abuse history	0.27
WMCI alternative	-0.04	Multiple caregivers	-0.33
WMCI14	0.04	Neglect history	0.33
PSOC efficacy	0.05	Number of children	0.37
Background risk total	-0.05	Poor housing	0.44
Attachment	0.04	Protective relationship	0.64
Hopes and dreams	0.05	Parent sex	0.88

These eight variables were then fed into a new model, and stepwise regression was conducted in R to define the best predictive model as variables were removed. Table 33 summarises the Akaike Information Criterion (AIC) score for each step, resulting in a model with three variables. Tolerance scores were high for the three final variables (0.74-0.91), indicating low multicollinearity.

Table 33 Backwards stepwise regression for best predictive model

Step	Variables included	AIC
1	CHN, INT1.3, INT3.1, WMCI2, WMCI7, ROC.pri, INT2.5, INT2.4	36.22
2	CHN, INT1.3, INT3.1, WMCI2, WMCI7, ROC.pri, INT2.5	34.23
3	CHN, INT1.3, INT3.1, WMCI2, WMCI7, ROC.pri,	32.3
4	CHN, INT1.3, INT3.1, WMCI2, WMCI7	31.27
5	CHN, INT1.3, INT3.1, WMCI2	30.26
6	CHN, INT1.3, WMCI2	29.29

CHN: Number of children; INT1.3: Parent reported neglect; INT3.1: Fragmentation; WMCI2: Parent awareness of child's emotional state; WMCI7: Parent description of relationship; ROC.pri: prior notifications; INT2.5: Conflict/stress with MCOT; INT2.4 Poor housing

Estimating the contribution of the 'number of children' to the model was not reasonable due

to the small numbers at each level (i.e. just two parents with four children, and two with five). Having a greater number of children was associated with an increase in the odds of having a subsequent notification. ‘Reporting a history of neglect’ in the parent’s childhood was associated with a 6.5 times increase in the odds of a subsequent notification ($p = .059$). For each one-unit increase in score on the WMCI2 (Parent awareness of the child’s emotional state), there was an average 4.1 times decrease in the odds of having a subsequent notification ($p = .26$). The model overall yielded a chi-square of 22.76 ($df = 7$, $p = .002$).

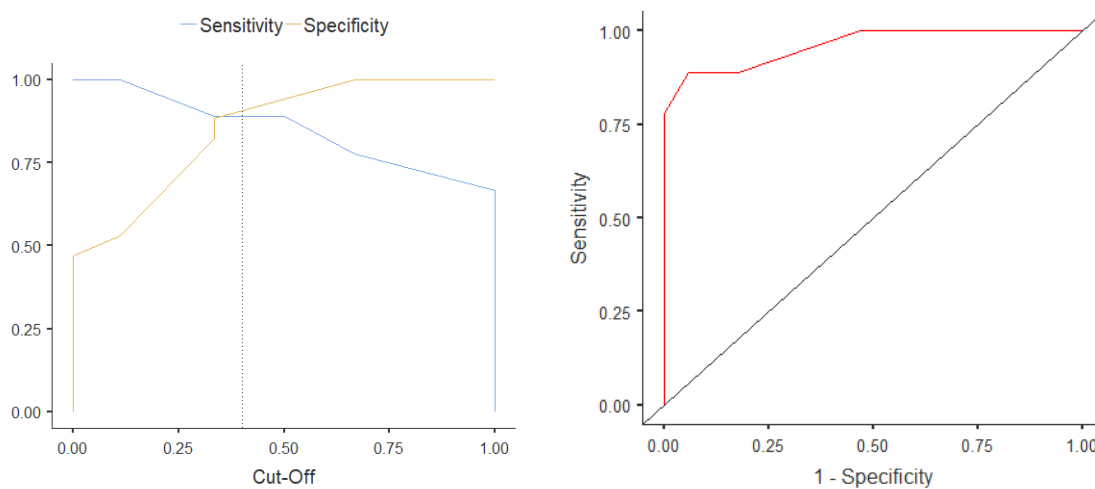


Figure 10 Specificity, sensitivity and receiver operating characteristic curve

Using a cut-off of greater than or equal to 0.4, 94% of those with no subsequent notification were correctly predicted with this model, and 89% of parents with a subsequent notification were correctly predicted. Overall, 24 of the 26 (92%) participants had an accurate prediction using this model (see Table 34).

Table 34 Classification table for predictive model

Classification Table – Subsequent notification			
Observed	Predicted		% Correct
	0	1	
0	16	1	94.12
1	1	8	88.89

Note. The cut-off value is set to 0.4

Chapter 8

Discussion

8.1 Summary of main findings

This study examined the psychological characteristics of CPS-involved parents with a view to identifying predictors of subsequent maltreatment. Participants' backgrounds showed high rates of past adversity and current challenges, and overall it was a true sample of maltreating parents. No self-report measures related to mood, self-regulation, parenting competence or satisfaction significantly predicted outcomes. Rates of depression, anxiety, stress, and difficulties with emotional regulation were broadly similar to rates of mood- and emotion-related problems among the general population rather than clinical, substance-using or CPS-involved populations. Participants' estimation of their own efficacy and satisfaction related to parenting were also high overall.

Parental reflective functioning and parental representations of parent-child attachment relationships were not associated with subsequent maltreatment notifications in this study. Attachment representations were likewise unrelated to subsequent maltreatment.

Cumulative risk scores on background experiences and other trauma-related measures did not predict subsequent maltreatment in this study (Ensink, Berthelot, Bernazzani, Normandin, & Fonagy, 2014; Perepletchikova et al., 2012). Among all the background experiences measured, two individual variables significantly predicted subsequent maltreatment (parent reporting neglect in their own childhood and having a higher number of children), and there were large effect sizes between some other variables and the outcome of interest. Further analyses identified eight factors likely to be associated with subsequent maltreatment, and these included four background factors: reporting a history of neglect; having more children; having more previous notifications; and reporting housing problems. Four relevant psychological constructs were also identified: reporting conflict or stress with CPS; having a fragmented narrative quality; having a limited awareness and understanding of one's own and one's child's emotional state when the child is hurt or upset; and having a

limited description of the parent-child relationship quality. Stepwise regression using these variables yielded a three-factor model that accurately predicted subsequent notification of harm for 24 of the 26 (92%) participants included ($p = .002$).

The broad psychological constructs of interest did not predict subsequent maltreatment in this study, but individual ratings on specific variables accurately classified group membership (having a subsequent notification or not) in this sample. However, it is also possible that because so many variables were measured, this type of analysis led to an idiosyncratic profile of salient variables which would not be replicated in a larger study.

8.2 Participants were a true maltreatment sample

This study recruited parents whose youngest child could be considered to be ‘on the edge of care’ due to ongoing involvement with CPS (Tarren-Sweeney, 2016). In order to ensure that findings are relevant to a population of maltreating parents, researchers should recruit participants who comprise a true maltreatment sample. CPS notifications are currently the best objective, accessible ‘hard marker’ of maltreatment, despite their acknowledged limitations (Whitcombe-Dobbs & Tarren-Sweeney, 2019). All participants in this study had CPS involvement. Two thirds of them had either spent time in OOHC themselves as children, and/or had older children removed into OOHC, at rates similar to a study of CPS-involved mothers who had grown up in OOHC themselves (Fusco, 2015). Full administrative data were not accessible, precluding the possibility of examining full histories of CPS involvement among the participants. However, sufficient data were released to confirm that this sample fulfilled the aim to recruit a ‘true’ sample of CPS-involved parents.

8.2.1 Likely selection bias

Participants were recruited via NGOs local to Christchurch. The original study design prescribed that in order to ensure that participants were parents where there were ongoing

concerns with child welfare, referrals should be sourced through local OT sites. This plan changed due to delays in approval processes, precluding the independent verification of OT involvement. Sometimes, families omit information about CPS involvement when working with other agencies, and the present study therefore relied on self-reported recent involvement with OT. Although all participants were confirmed to be known to CPS when administrative data were finally accessed, this did not preclude selection bias occurring. Staff from NGOs were asked to refer families, and it was apparent, through discussions, that parents were referred whom staff members thought would be more likely to agree to participate in the study – despite requests for them to give all eligible parents the opportunity to participate. Furthermore, nil participants were sourced from 4/8 NGOs. Therefore the participants in this study possibly under-recruited the more ‘difficult to engage’ clients of those services.

8.2.2 Parents’ reported experiences of child maltreatment

Parents in the present study reported rates of personal maltreatment histories broadly similar to, or at higher rates than, CPS-involved parents in previous studies. For example, in one study of mothers who had had their child removed by CPS, rates of self-reported physical abuse and neglect were very elevated compared to community controls but lower than in the present study, while rates of sexual abuse were similar (Perepletchikova et al., 2012). All but one of the present study participants reported experiencing at least one form of maltreatment, and ninety percent reported physical and/or sexual abuse. Participants were not explicitly asked to report on abuse experiences; rates were estimated from narrative descriptions of participants’ childhoods. This method is likely to have under-estimated, if anything, rates of child maltreatment. An alternative explanation may also be that parents who described being hit or beaten as children would not classify their experiences as ‘physical abuse’ were they to be asked about this directly in a questionnaire. Retrospective recall of child maltreatment

yields higher reported rates than using CPS data on current involvement for maltreatment (Stoltenborgh et al., 2015). Certainly among the participants of this study, some parents described harrowing personal histories, including severe and violent physical and sexual abuse along with serious deprivation.

8.2.3 Notification rates

A recent Australian study found that among 9,608 children first notified to CPS, 40% were re-notified within 12 months and 18% were re-investigated (Jenkins et al., 2018). However, equivalent NZ rates have not been published. The present sample's 8-month post-assessment re-notification rate of 31% appears broadly within the expected range, especially given that Australia has mandated professional reporting laws and Aotearoa/NZ does not. There are many factors affecting notification recurrence. For some parents in this study who were well-known to OT, it was possible that professionals no longer made formal notifications regarding their concerns despite these being ongoing. This was anecdotally reported in several cases.

The reliability of the notification rates may have been compromised by the dataset supplied from OT, in that only 'distinct' ROCs were counted in the data. This was due to an idiosyncrasy of way in which social workers enter information into the CPS database, and independent checking of the data was not permitted. This may have led to an underestimation of the ROCs that occurred during the 16-month period, which could have been ruled out by gathering further detail directly from the database.

8.3 Does PCA predict subsequent maltreatment?

No individual psychological characteristics measured in this study significantly predicted subsequent maltreatment notifications for CPS-involved parents, suggesting that specific components of PCA were not clearly useful in identifying parents who can and cannot

change. Real-world child protection parenting assessments are usually completed in the context of former abuse and/or neglect. The purpose of PCA in these cases is generally to identify areas of risk for future harmful parenting, and by implication which parents are unlikely to be able to provide ‘good enough’ parenting within a timeframe that will allow their children to develop according to their potential (Budd et al., 2001). Decisions about future placements are made on the basis of PCAs, which seek to answer the question ‘can these parents adequately care for their children?’ The data gathered for this purpose therefore should include factors that are predictive of future behaviour for this particular population of parents.

This study addressed the research question and found that among this group it was currently impossible to reliably identify, with the measures used, which parents would go on to receive a notification of harm and which would not. In particular, self-report measures are unlikely to contribute useful and accurate information to PCAs. This calls into question current PCA methods that rely on a large body of evidence regarding predictors of harm among a general or even high-risk populations (e.g. Harel & Finzi-Dottan, 2018; Horwitz, Hurlburt, Cohen, Zhang, & Landsverk, 2011; Lowell & Renk, 2017; Wulczyn, 2009). The fact that all child welfare PCAs are by necessity conducted with this group of parents demonstrates our quandary: there is a lack of evidence for the predictive validity of PCA components underpinning decision-making in the context of child protection (López et al., 2015).

8.3.1 What are the implications for assessing parental RF as part of PCA?

There is a strong movement towards measuring attachment and parental RF as key factors in assessing parent-child relationships in the context of maltreatment (Zajac, Raby, & Dozier, 2018). This is appropriate given evidence suggesting that it may be this quality among parents that differentiates between those that ‘pass on’ trauma and those that do not

(Berthelot et al., 2015; Grienberger et al., 2005). Furthermore, interventions explicitly targeting mentalization ability in parents have been shown to prevent subsequent CPS involvement in at least one study (Sadler et al., 2013). Given the findings of this study, then, there are two points to highlight with regard to parental RF, (1) attachment disorganisation is distinct from child maltreatment as measured by CPS notifications, despite it being consistently linked with higher rates of familial dysfunction and poor child outcomes, and (2) CPS-involved parents who display moderate parental RF may go on to engage in harmful parenting practices at much the same rate as parents who display low parental RF. Discussing the parent-child relationship in ways that are associated with secure attachment and medium RF was not linked with whether or not a parent received a CPS notification. This finding does not necessarily contradict the prior studies highlighting parental RF and attachment representations as constructs influencing parenting behaviours in important ways over time (Goldberg et al., 2003; Zajac et al., 2018). Rather, this study suggests that low parental RF should not be considered on its own as predictive of subsequent harmful parenting, particularly when measured as part of PCAs undertaken in the context of child maltreatment. Furthermore, addressing these constructs within parenting interventions may be essential in our quest to locate effective treatments for maltreating parents (Sadler et al., 2013). Yet the standard of proof for decision-making in child welfare requires caution in the application of research findings to real-world settings (Granqvist et al., 2017; Van Ijzendoorn et al., 2018).

8.3.2 Current PCA practices may not be fit for purpose

These findings pose a challenge to aspects of currently-recommended practices within the published models of PCAs in the context of maltreatment. Of the 11 models reviewed in chapter two, all recommended assessing parent-child relationships, ten recommended assessing parent characteristics and nine recommended assessing parental backgrounds. Yet none of these components predicted subsequent maltreatment in the present study. PCA

conducted with CPS-involved parents serve purposes other than identifying those who are likely to subsequently maltreat their children, however. Assessments identify: current parenting skills; individual child needs; potential barriers to change; family resources and external supports; and ascertain current or recent harmful parenting practices (Azar et al., 1998; Budd et al., 2001). These aid courts and CPS in service planning and provision as well as in decision-making for determining child placements and access arrangements. Thus the common components of PCA are essential in providing decision-makers with information about the type of parenting the child is experiencing day-to-day and the specific needs and challenges facing CPS-involved parents. Yet full reliance on the predictive validity of PCAs must be questioned, and self-report measures should not be viewed as accurate in every case. Courts and CPS may need to respond differently to high-risk care matters to ensure child wellbeing. Rather than solely relying on PCAs to determine whether a child should be taken into OOHC, other methods for monitoring safety and measuring parental behaviour changes should be put in place when children remain with their parents (Platt & Riches, 2016a).

8.3.3 Cumulative risk models do not apply to very-high-risk parents

Cumulative background risk scores did not predict subsequent harm among the participants in this study. One previous study has shown that among a group of CPS-involved mothers, cumulative risk scores predicted permanent custody loss of infants, but while statistically significant this was impracticable (Larrieu et al., 2008). Cumulative risk in Larrieu et al.'s 2008 study was based on factors that were not all captured in the present study, and their sample was larger with 93 mothers of children who were at risk of losing custody of their child. However, their overall finding aligned with the findings of this study, in that no specific risk factor reliably predicted custody loss (Larrieu et al., 2008). Other studies examining cumulative risk for maltreatment among high-risk and abusive parents have not yielded strong predictive models of subsequent maltreatment (Ethier, Couture, & Lacharité,

2004; Festinger, 1996). Despite this, exploration of cumulative risk for this population should continue, as the few studies conducted so far have varied in design and measures of risk. Replication with larger samples and a wider definition of risk would provide clarification as to whether total number of risk factors should be a strong consideration when conducting PCA with maltreatment parents. The evidence so far is insufficient, however, to justify using cumulative risk as a rationale for decisions regarding child placement.

8.3.4 Possible predictors of subsequent notifications

The predictive model accurately classified most participants (92%) based on scores on three variables (number of children, parent reporting neglect and parental awareness of child's emotional state), but these results should be interpreted with caution due to the small sample size. This model yielded higher accuracy scores than those found in two previous studies of CPS-involved parents, one of which looked for predictors of chronic CPS involvement (73%), and one that looked for predictors of permanent custody loss (74%; Ethier et al., 2004; Larrieu et al., 2008). The addition of the more subtle psychological characteristics appears to have increased the accuracy of the model when combined with the broader demographic risk factors.

These demographic factors align with existing research findings. Higher numbers of children and having housing problems are factors often related to poverty, and are well-known risk factors for maltreatment within the wider literature (Wulcyn, 2009). Increased number of children in a family leads to a commensurate increase in the likelihood of maltreatment detection. This is due to more adults becoming involved with a family, such as teachers or health professionals, for each additional child. Notifications in this study were tied to the parent rather than one child, so parents with more children had proportionally more chances of receiving a notification. Economic hardship is a well-known risk factor for maltreatment in the general population (Doidge et al., 2017), but among a population of CPS-

involved families poverty does not determine maltreatment. Poverty and higher numbers of children do increase overall family stress in these families, however, and it is likely that among families with potential to maltreat these stressors may act as precipitants for harmful parenting (Cicchetti, Toth, & Maughan, 2000).

Parents in this study who were themselves neglected as children were 6.5 times more likely to have a subsequent notification of harm. Neglect, along with emotional abuse, has been associated with higher risk for non-positive parenting (Harel & Finzi-Dottan, 2018), and neglect has been implicated in the development of attachment disorders and increased trauma symptoms in children (Milot et al., 2010; Smyke, Dumitrescu, & Zeanah, 2002; Zeanah & Gleason, 2015). Among all types of maltreatment, neglect – the absence of adequate caregiving – is most clearly associated with disorders of non-attachment in children. An attachment disorder can be a pathway to the kind of disengaged ‘switched off’ parenting often seen in very deprived parents, sometimes with corresponding learning difficulties, consistent with being profoundly neglected in early childhood. Parents who have never experienced responsive caregiving themselves have inadequate personal experiences upon which to draw when providing care for their own children. They may desire to parent well, but be incognisant of their own deficits, and of the sensitivity and care which their children require. These types of cases illustrate an *incapacity* to parent adequately, rather than unwillingness or malevolence on the part of the parent.

Having a more fragmented personal narrative, and a lack of awareness of one’s child’s emotions, both relate to unresolved trauma and a lack of emotional awareness (Berthelot et al., 2015; Crandall, Deater-Deckard, & Riley, 2015; Sprang et al., 2005). This study did not measure unresolved trauma explicitly through the WMCI, precluding direct comparison with previous studies. However, fragmentation of narrative quality is related to unresolved loss and trauma, which has in turn been associated with severe psychopathology

in mothers (Gojman-de-Millán & Millán, 2019). Poor emotional awareness has also been found among women with histories of maltreatment and mothers with borderline personality disorder (Cole, Llera, & Pemberton, 2009; Elliot et al., 2014), and was more common among parents in this study who had been neglected. This alexithymia could be considered a sub-skill of parental RF, as this variable was specific to describing unpleasant emotions in their children, and their own response, concerning an episode in which their child was distressed. Thus some parents, who may be able to mentalise in general, may well be less able to do this when their child is sad, frightened and upset – a point at which it is particularly essential to a child’s sense of emotional safety and containment (Slade, 2005). This particular quality, of recognising distress in one’s child, and being able to notice and describe one’s personal response to this, is worth exploring further among CPS-involved parents.

One further psychological characteristic measured parents’ level of detail or richness in describing the parent-child relationship. One prior study, using the WMCI to examine maltreatment severity among CPS-involved parents, found a similar result, with more extreme and chronically neglectful and physically abusive parents’ WMCI narratives being low in detail, acceptance and sensitivity (Sprang et al., 2005; Zeanah, Benoit, Barton, & Hirshberg, 1996). It may be that WMCI classifications reflected blunt estimations across a range of areas, whereas passages closely focused on a parent’s thoughts and feelings about their child reflected more subtle differences between the participants. Yet no simple linear associations between item responses and subsequent maltreatment were found.

Of all the variables measured in this study, a model built from only three factors significantly predicted subsequent maltreatment in this study. This finding should be interpreted with caution, as this merely reflects an increase in the odds of being in the group of parents with a subsequent notification within the eight months following assessment and is not determinative. In reality, any number of dynamic factors affect a parent’s ability to parent

safely; risk is never fixed in time, and this study omitted comprehensive, triangulated data. Neither actuarial nor structured clinical instruments have been shown to be sufficiently predictive of harm, and although more sophisticated machine-learning models are being developed they are also plagued by the pitfalls of inaccurate, biased and insufficient data (Keddell, 2015; van der Put et al., 2016). An accurate prediction of future events for any individual parent is dependent on other, changeable factors within the parent themselves but also within their environments (Jenkins et al., 2018; López et al., 2015). In this way, it is more appropriate to consider risk *relative* to an individual and family's current status, which would include the characteristics and vulnerability of the child.

8.4 Measures and methods

8.4.1 Substance use

The rate of substance use in this study was higher than that found among US-based parents receiving in-home services from child welfare, but lower than among parents whose children had been removed into OOHC (Young, Boles, & Otero, 2007). Study participants reported using illicit drugs at about five times the rate of the general Aotearoa/NZ population (11% vs. 55%; New Zealand Drug Foundation, 2013). Alcohol use was also higher, with about one in three study participants reporting drinking levels classified as 'hazardous' compared to about one in five New Zealanders (New Zealand Drug Foundation, 2013). Although substance use is a well-known risk factor for child maltreatment (Doidge, Higgins, Delfabbro, & Segal, 2016), substance use did not differentiate between CPS-involved parents regarding risk for future maltreatment. Among people suffering from post-traumatic stress, substance use is a common 'coping mechanism' whereby distressing emotions are dulled or suppressed (Benton, Deering, & Adamson, 2012; Ullman, Relyea, Peter-Hagene, & Vasquez, 2013). The higher rates of substance use in this study were therefore unsurprising, and most participants appeared willing to disclose their current substance use. Parents undergoing PCA in a

forensic assessment setting may be less forthcoming. A recent study of maltreating parents with and without substance use disorder found no increased harm among those using substances (Goldberg & Blaauw, 2019). Along with findings from the present study, this calls into question the relevance of common practices such as drug-testing parents during court proceedings, and referring to substance use as evidence for likely future harm (Lloyd & Brook, 2019).

8.4.2 Quantitative self-report measures of mood, emotional regulation and sense of competence

No measures of mood, emotional regulation and competence differentiated parents with a subsequent maltreatment notification from those without. There are two possible explanations: either none of these psychological states or constructs were predictive of harmful parenting among the participants, or not all participants reliably reported their internal experiences and beliefs. The very small and non-significant effect sizes between these measures and the outcome suggests the former. Depression has been shown to be predictive of harmful parenting in other larger studies, but in this small group of high-risk parents this was not the case (Jedwab et al., 2017; Larrieu et al., 2008). Rates of depression in this study appeared to be broadly similar to previous studies of parents with child welfare involvement, but actual rates (as opposed to self-reported rates) were not able to be estimated. Similarly to the 12-month prevalence found in a large-scale study of mothers involved with CPS, just over a quarter of parents in this study reported elevated symptoms of depression (Casanueva et al., 2011).

No prior studies have been found that used the DERS with CPS-involved parents. Two previous studies have shown that people with significant psychopathology, or mothers exposed to intimate partner violence, reported much higher rates of emotional regulation problems on the DERS than participants in this study (Boeckel, Wagner, & Grassi-Oliveira,

2017; Gratz et al., 2014). However, neither of these studies were conducted in contexts that would lead parents to under-report difficulties. Some participants in this study reported markedly low difficulties in emotional regulation, but observation during the data collection phase highlighted clear difficulties in managing arousal. For example, one parent was physically agitated during the background interview, needed to break for a cigarette, and regularly shouted at her toddler at unpredictable times. Yet her DERS item responses yielded scores indicating strong emotional regulation. Other parents, when completing the DERS, commented that the items described some of their challenges very accurately (Newman et al., 2007). The DERS scores in this study likely represent a combination of accurate and inaccurate responses among the participants. In order to accurately complete the DERS, one requires personal awareness of one's own limitations – suggesting a flaw in this measure's validity for some people. Findings from this study suggest the DERS is an inappropriate measure for estimating emotional regulation ability in CPS-involved parents.

Most parents reported confidence in their own parenting abilities along with a sense of enjoyment. This suggests that they had high-levels of parental self-efficacy, or that self-serving bias (or a desire for the researcher to approve of them) inflated scores. PSOC scores were unrelated to subsequent harmful parenting in this study. The PSOC has been recommended as a relevant and useful tool in the field of child protection (Nunes, Jiménez, Menéndez, Ayala-Nunes, & Hidalgo, 2016), and self-efficacy is thought to be a potential indicator of risk for child maltreatment (Jones & Prinz, 2005). There is a large body of research suggesting that among the general population, parenting self-efficacy is related to a range of parenting qualities, including sensitivity and competence as well as specific behaviours such as monitoring and safety (Jones & Prinz, 2005). It is possible that parenting self-efficacy plays a mediating role between risk factors and outcomes, but the evidence to date does not clearly support this (Álvarez, Rodrigo, & Byrne, 2018; Jones & Prinz, 2005).

Literature from several studies links parental self-efficacy with competence (e.g. Izzo, Weiss, Shanahan & Rodriguez-Brown, 2000; Dumka, Stoerzinger, Jackson & Roosa, 1996, Shumow & Lomax, 2002, cited in Jones & Prinz, 2005). This increases the risk that in using this tool in PCA, parental sense of effectiveness or satisfaction becomes conflated with effective parenting, or a positive parent-child relationship. Although prior studies have demonstrated a link between parenting behaviours and efficacy among high-risk or previously-maltreated parents, none to date have established whether this is predictive of subsequent harm (Borelli et al., 2010; Martinez-Torteya et al., 2018). Findings from this study suggest that among parents with CPS involvement, self-reported parenting self-efficacy may be unrelated to whether or not subsequent harmful parenting will occur. One recent longitudinal study aligns with this finding, showing that among a sample of previously-maltreated mothers, self-reported parenting self-efficacy did not mediate the relationship between maltreatment history and later parenting behaviour (Michl-Petzing et al., 2019).

8.4.3 Background measures and method

The open-ended, interview-based method of collecting background information limited the ways in which the data could be used. Because direct questions were not asked about specific maltreatment experiences, final estimations depended on the free recall of childhood experiences that each participant chose to describe. Whether this approach over- or underestimated abuse and neglect prevalence is unclear, but a brief ACEs questionnaire would have elicited information that could be compared to similar groups in other published studies. This personal information was gathered during the first face-to-face session, so this naturalistic discussion may have enhanced participants' commitment to continue in the study – whereas direct and intrusive paper-based questions may have risked further attrition. Several factors influence the engagement of parents involved with child welfare, and methods for data collection aligned with these while also meeting study objectives (Damiani-Taraba et

al., 2017). The low rate of disengagement provides some evidence that this method was appropriate, as well as being culturally-responsive (Pere & Barnes, 2009). Asking about hopes and good memories disrupted the one-dimensional framing of CPS-involved families as existing in abject misery, and provided context and richness to the experiences of participants.

8.4.4 Interview-based measures of attachment and parental reflective functioning

The use of a semi-structured interview to measure psychological functioning mitigated some of the risks of using self-report questionnaires. It is unlikely that participants were able to accurately identify and present verbal responses that would lead to socially-desirable classifications. Scores from the recorded interview may then be more reliable estimations of participants' attachment status and reflective functioning than the self-report measures were of the other constructs.

8.4.4.1 The Working Model of the Child Interview – feasibility and utility

The WMCI appeared to be feasible and acceptable, with none of the participants who began it failing to complete it in one sitting. It was common, however, for parents to struggle to answer the more complex and abstract questions about the parent-child relationship. This may have been due to parents' lack of reflection about the nature of their relationship with their child, or it could have been that the question is intellectually-demanding. Parents with learning difficulties did not appear to struggle more than others, so the former seems more likely.

8.4.4.2 Do measures of attachment style predict subsequent harmful parenting among high-risk parents?

Studies have found an association between maternal attachment styles and infant attachment organisation, parenting behaviour, and child behaviour (Cooke, Racine,

Plamondon, Tough, & Madigan, 2019; Goldberg et al., 2003). The relationship between child maltreatment and adult health outcomes is mediated by attachment style, with higher psychopathology in adults evident among those with histories of child abuse and anxious and avoidant attachment styles (Cicchetti & Doyle, 2016; Widom, Czaja, Kozakowski, & Chauhan, 2017). However, traditional attachment classifications do not refer to other, sometimes more serious, attachment problems such as non-attachment or attachment organisation. Attachment style refers to a pattern of engagement, not whether a parent engages at all or in an unpredictable manner. The strength of the parent-child bond is also not captured within Ainsworth's (1978) original categories. Adult attachment representations, mapping onto the original three-way classification system, were measured in this study. Classification rates were similar to those in a study of mothers referred to a mental health clinic for families at high risk (Schechter et al., 2005). Infant and child attachment was not measured, nor was the 'D' classification of the WMCI used for the analysis, which may have yielded different results. Yet there is little evidence supporting its appropriateness for use in practice settings, as it is not clearly deterministic of subsequent harm (Granqvist et al., 2017; Ijzendoorn et al., 2018). Parents with the 'balanced' classification were no less likely to have a subsequent notification than parents with the 'disengaged' or 'distorted' classification, and attachment representations were not related to anxiety or depression among the participants in this study. This finding provides further support to the general consensus that the classification of attachment style (using the traditional three categories) is of little clinical utility for practice settings (Granqvist et al., 2017; Rutter, 1995).

While parental attachment representations were not predictive of subsequent harm, some specific responses to WMCI questions may be useful for intervention planning. There is a need for parenting treatments for CPS-involved families to be individualised; dismissive parents may be quite different in their support needs from those who have a distorted view of

their child. Thus attachment-based interventions for this population would ideally match their targets to the individual parent-child relationship; when populations needing support are heterogeneous in presentation, treatment tools should be too.

8.4.5 Parental Reflective Functioning

Reflective functioning scores among parents in this study were lower than those found in the general population (Grienberger et al., 2005; Sadler et al., 2013). This was expected given that the sample was more similar to other high-risk parents (Pajulo et al., 2012). Previous research on parental RF has linked this construct to a range of parenting outcomes and behaviours including subsequent CPS involvement (Sadler et al., 2013), attachment relationships and organisation (Berthelot et al., 2015; Huth-Bocks et al., 2014) and maternal sensitivity (Ensink et al., 2019; Suardi et al., 2018). There is mixed evidence regarding its relationship to trauma and PTSD, however, and it is thought that parental RF and trauma severity may interact in ways that are not yet delineated by the research so far (Berthelot et al., 2015; Schechter et al., 2005).

In this study, parental RF was not associated with attachment representations nor was it related to subsequent notifications of child maltreatment; there were no significant differences in parental RF between parents with a subsequent notification and parents without. Furthermore, participants' substance use, emotional regulation ability, and mood status did not predict or correlate with parental RF as has been found in some other studies (Pajulo et al., 2012). Despite this, RF did interact with other measured constructs in more conventional ways. Parental RF scores were weakly associated with some aspects of narrative quality, and the alternative coding procedure devised for this study was moderately associated with parental RF, and showed a small but significant effect size in predicting low or medium parental RF.

There are two potential explanations for the lack of the expected effect. Firstly, among this group of CPS-involved parents, parental RF does not factor as significantly as thought from the evidence to date. It is true that in other studies when overall risk increases, the centrality of parental RF as a construct seems to reduce in importance, and it may be that when environmental and other risk factors increase then the role of parental RF becomes relatively smaller in predicting future maltreatment events (Perry, Newman, Hunter, & Dunlop, 2015; Stacks et al., 2014). A second possible explanation is that the sample size was simply too small and too homogenous in parental RF to detect any real differences. Parental RF variability was low and the group were almost uniformly high-risk. These two possibilities are not mutually exclusive, in that parental RF may have less relative importance in this population, and there may also be less variability in parental RF among CPS-involved parents.

8.4.6 Researcher-rated measures

Several researcher-rated measures were included in this study, and in addition to the independently-coded parental RF scores and CPS data, these allowed for multiple measures of some constructs. This allowed for clinical ratings to be analysed alongside self-report and independent ratings. While descriptive observations are used for PCAs, the application of a consistent coding approach across all participant datasets meant that these could be included in the quantitative analysis. Some of these were promising and may provide a way to operationalise particular behaviours and characteristics related to parenting in this population.

8.4.6.1 Narrative quality

The manner in which participants spoke about their experiences during the background interview was related to trauma severity, in that participants whose responses were delivered in a ‘stream of consciousness’ style as opposed to a more structured and linear narrative were likely to also have a higher background total risk score. One specific aspect of

this type of narrative was ‘intrusion of memories’, whereby a participant may be answering one question and then begin describing a seemingly-unrelated traumatic memory. An example of this was a participant who was asked about a specific incident with her parents, but described in detail finding her baby brother dead. These qualitative observations are likely related to the signs for ‘unresolved trauma’ on the AAI, and these findings suggest that deliberately observing the manner in which parents speak may be clinically relevant for overall psychological presentation and therefore individualised intervention planning (Fraiberg, Adelson, & Shapiro, 1975; Lieberman, Van Horn, & Ghosh Ippen, 2005). The quality ‘fragmentation’ was related to both memory intrusion and a ‘stream of consciousness’ quality, suggesting that all three may be inter-related and also predict trauma-related symptomatology, but this would need to be explored through future research. Fernerci and Prince (2018) examined trauma symptoms, memory organisation, trauma-related cognitions and toddlers’ mood and behaviour problems among mothers with a history of maltreatment. Significant interactions were found between the mothers’ trauma-related cognitions and child outcomes, demonstrating further possible mechanisms whereby parental histories of trauma impact on children. In this study, narrative quality was related to other constructs in expected ways, but was not associated with subsequent harm.

8.4.6.2 WMCI alternative coding procedure

The alternative coding procedure was developed in order to operationalise particular aspects of the WMCI that appeared to be most related to child maltreatment. These questions covered: the parent’s responses to their child when upset and when exhibiting difficult behaviour; the parent’s description of the parent-child relationship; a favourite story about the child; whether the parent could recognise that their child may have experienced setbacks; and whether the parent could identify aspects of their own behaviour that should have changed. Total scores predicted medium parental RF among the study sample with a small effect size

($OR = 1.57$; 95% $CI = 1.04 - 2.36$), and parents whose responses to item two showed poor ability to think about and acknowledge their own and their child's emotions were 2.7 times more likely to have a subsequent notification of harm, although this was not significant ($OR = 2.7$; 95% $CI = 0.69 - 10.28$; Chen, Cohen, & Chen, 2010).

In focusing on questions that were hypothetically most relevant, this procedure does not provide an overall estimation of the narrative's tone and is not directly measuring attachment. However, this study's findings suggest that further exploration of an item-based approach to analysing the WMCI may be useful in identifying more subtle parenting characteristics associated with risk for future harm. When coded traditionally, the WMCI only yields three classifications and most parents in the present study were coded as 'distorted'. The lack of variability was limiting and did not allow for any nuances between parents' narratives to be identified. Yet the WMCI itself yields rich information about parents' views on their child that is not used beyond the blunt three-way (or, in the case of the 'D' classification, two-way) coding. Thus there are several practical advantages of using an alternative coding procedure for the WMCI. Firstly, it allows for a finer-grained and targeted analysis of parents' WMCI responses. Examining these against a set of explicit criteria provides ratings that highlight areas of weakness, which may be useful in both capacity assessment and intervention planning. It is also a quicker and simpler coding system, in that shorter excerpts of parent responses are examined. It may even be possible to reliably administer and code responses using notes rather than recording and transcribing, and if so this would yield a significant feasibility advantage, increasing the likelihood that this measure is used by researchers and clinicians. One prior study has measured qualitative features of the WMCI narrative, including 'richness of detail, openness to change, intensity of involvement, coherence...sensitivity, acceptance' (Sprang et al., 2005). The combined score on this measure was found to be predictive of current levels of maltreatment severity among a group

of parents with substantiated cases of abuse or neglect. Given the association with parental RF, alternative approaches to coding specific item responses from the WMCI are worth exploring further. They may be more closely related than whole-narrative classifications to parenting sensitivity and other specific areas of harmful or protective parenting behaviours (Sprang et al., 2005).

8.4.6.3 Parental focus on the child scale

The PFOCS was the only measure that included ratings based on behavioural observations of the parent with their child, and aimed to measure an as-yet undefined construct we have termed ‘awareness of the child’. Other general observational rating scales, such as the Dyadic Parent-Child Interaction Coding System II (DPICS-II) or the Crowell procedure, may have also been useful in determining individual differences in parenting behaviour but these required structured procedures that were deemed to be less acceptable for the desired population and unsuitable for uncontrolled home environments (Hakman, Chaffin, Funderburk, & Silovsky, 2009; Loop, Mouton, Brassart, & Roskam, 2017). This measure appears to have captured a unidimensional latent construct related to a parent’s observed ongoing awareness and sense of responsibility for their child, with excellent levels of internal consistency. This hypothesised construct reflects normative parent development, a process by which parents acquire a permanent state of mind whereby they are both aware of their child’s current state and have a general sense of responsibility towards their child. This is thought to vary in intensity, in relation to the child’s age and developmental needs. A newborn baby’s parents have a different mindset from the parents of a child who has grown up. However, the underlying frame of mind is thought to endure over time, and may be qualitatively different among parents who neglect their children from those who do not.

Total PFOCS scores were also moderately associated with the alternative WMCI coding procedure and parental RF, and lower scores (indicating lowered ‘awareness of the

child’) were associated with reporting a history of self-harm or suicidality. Researcher-rated ‘awareness of the child’ was not predictive of subsequent harm within this sample, but findings warrant further exploration of this construct and its relationship to other parenting measures. Specifically, it was thought that PFOCS scores may be related to subtypes of maltreatment such as child neglect, but this possibility was not able to be explored through the present study.

8.4.7 The use of notification as proxy indicator of actual harm

Notifications of harm were considered to be the most direct measure of harm occurring towards a child. Child notifications remain higher among children who are eventually uplifted into OOHC, suggesting a strong relationship between notifications and actual harm among the wider population, but this is not always be the case at the individual level (Rebstock et al., 2015). Many children grow up experiencing severe maltreatment who are never uplifted (Rouland et al., 2019; Stoltenborgh et al., 2015). Notifications occur more often in families who have higher uptake of services, possibly due to the increased monitoring from professionals, and children from families who are isolated can be overlooked by CPS (Jenkins, Tilbury, Mazerolle, & Hayes, 2017). Service provision, intended to reduce notification recurrence, is also a demonstrated risk factor for notification recurrence (Jenkins et al., 2017). This phenomenon may have occurred in the this study, creating an unmeasurable confounding factor (and indeed, system-wide data are likewise compromised, creating an argument that the data upon which all predictive algorithms for child protection are based are fundamentally flawed; for further discussion see Jenkins et al., 2017; Keddell, 2019). Each parent referred for participation in this study was receiving NGO services, mitigating the risk that isolation artificially under-estimated levels of actual harm. Ideally, further information about individual family functioning would be gathered alongside CPS data to create triangulated measure of ‘estimated actual harm’ occurring for a child.

8.5 Parents identifying as Māori

Data are not available at the local level to establish proportions of Māori vs. non-Māori parents involved with OT. In Christchurch, 8.2% of the population identify as Māori, whereas 38% of the parents in the present study were Māori (Statistics New Zealand, 2013). It is estimated that approximately one-third of parents who have ongoing involvement with CPS in Christchurch are Māori (Whitcombe, personal communication, 2017). Given this context and the small sample size, rates of Māori participation were about what was expected.

For the 11 participants who were Māori parents, descriptions of their whakapapa, identity and sense of cultural connectedness were heterogeneous and no consistent themes were easily identified. Some participants recalled experiences of abuse and associated these with their abusive parent's culture. For others, memories of cultural activities with parents were significant touchstones of identity formation and connectedness. There is strong evidence that traditional parenting as Māori is qualitatively different from parenting within Western cultures (Jenkins, Harte, & Te Kahui Mana, 2011). Children are viewed as taonga (treasure/precious), and non-punitive parenting towards young children is normal. As the whakataukī says, '*Ko te mahi a te tamariki, he wāwāhi tahā*' (the activities of children break calabashes), which strongly differs from Western narratives about compliance being a desirable quality in a child (Higgins & Meredith, 2011). This study did not examine cultural practices and beliefs regarding parenting among the participants, but it is likely the characteristics measured are affected by the cultural connections and experiences of Māori participants in particular (Te Puni Kōkiri, 2010). For example, a collectivist organisation to society may well contribute to ways of feeling competent as a parent, the sense of parental responsibility one has and the input from wider whānau and hapū members regarding parenting and childcare (Jenkins et al., 2011; Te Puni Kōkiri, 2010). In turn this may also

interact with the ongoing impact of colonisation and its role in creating and perpetuating violence towards Māori (Te Puni Kōkiri, 2010).

The child protection system in Aotearoa/NZ has an uncomfortable relationship with Māori, and it can be viewed as harmful towards whānau and tamariki Māori (Radio New Zealand, 2019). Given the context of cultural oppression, OT can represent a high-handed colonising government. There are many kaupapa Māori and iwi-based services for supporting at-risk families but to date none are mandated to conduct statutory-level child protection intervention such as child removals or FGCs. Current legislation allows for this possibility and discussions between iwi and government are ongoing (New Zealand Government, 1989; Walters, 2019). Research and practice in this field conducted by Māori for Māori, privileging Mātauranga Māori and Māori experiences, are thought to be more likely than current practices to lead to better outcomes for whānau Māori:

“I am totally convinced that current western models, western approaches to dealing with domestic violence is faulted and runs short for Māori people. They may very well be proven to be effective with Pākehā people, but it does not work I know that for myself in seeing it in operation...There are certain people you can go to and there are certain people you can't. It's got nothing to do with qualifications in a western way”
(Te Puni Kōkiri, 2010, p. 31)

However, inequalities in resourcing for kaupapa Māori and iwi-based services (vs. mainstream services) persist, undermining stated commitments to partnership and reinforcing existing power structures (Crengle, 2000). Recent large reviews and treaty claims have highlighted continuing discrepancies across the board for Māori, building the case for systemic overhaul across health and social development systems (Waitangi Tribunal, 2019). The present study had insufficient sample size from which make any valid or reliable

comparisons between Māori and non-Māori parents involved in the child protection system in Christchurch. Further research is needed to identify cultural influences on psychological characteristics related to parenting among Māori CPS-involved parents, alongside existing assessment and intervention models embedded within te ao Māori and other bicultural settings (Kara et al., 2011; Muriwai, Houkamau, & Sibley, 2015; Pitama et al., 2007; Walters & Seymour, 2017).

8.6 Limitations of the current study

The present study had a very small sample size and there was a likely sample bias towards parents who were more compliant, motivated or engaged. Recruitment was difficult, and gaining appropriate approvals took a high proportion of the study's timeline. Due to the considerably smaller-than-planned sample size, multivariable logistic analyses were deemed inappropriate, and these are likely to have yielded interesting and important information. Moreover, due to ethical and feasibility challenges, no collateral informants or sources were available, so much information was gathered directly from parents—precluding the triangulation of data about their parenting characteristics. Many of the variables measured were stable, but dynamic factors such as mood or current concerns were only measured once, providing a 'snapshot' of current functioning rather than data sufficient for establishing a pattern.

Several measures were researcher-rated, and as yet no inter-rater reliability data are calculable for most of the measures. Therefore results based on these measures have yet to be established as reliable. The coding of the WMCI was done by the primary researcher, who was trained for 'clinical' use by the measure's co-creator and not 'researcher' standard (i.e. a publishable standard). Research designs and methods mirror the ideologies and biases of those who undertake them, and this research project was no different. The qualitative data that were gathered could have been analysed in several different ways that may have yielded

richer results. In particular, a qualitative approach to the background interviews may have led to greater insights into the subjective experiences and views of the participants.

Eight months post-assessment was a shorter follow-up time than was ideal; 12 months would have allowed a longer time for more variation in notifications to occur and would have mapped on more closely to previous studies examining notification rates. Many of the measures suffered from the problem of proximity. For example, depression symptoms as measured by the DASS are proximal indicators of the internal experiences of the parent on that day, which are in turn held to be representative of their overall mood status. While participants were the ‘experts on themselves’ this meant that when their own knowledge of their emotions or behaviour was limited, so too was the accuracy of the scores yielded by their responses.

Given the high levels of participant engagement with the researcher, it is possible that there was a therapeutic effect of the data collection process itself, or there was a Hawthorne effect. Indeed, some positive feedback from NGO staff members and participants suggested that this was the case in the short term. Despite this, it is very unlikely that three one-hour information-gathering sessions were sufficient to reduce subsequent maltreatment in this population, so it seems reasonable to assume that this did not unduly affect subsequent rates of notification.

A conventional, ideal study approach would have been to re-administer all measures following the elapsed period of time during which the parents received a parenting intervention. This was deemed to be unfeasible and largely futile as some parents were receiving active treatment and some none, and the treatments themselves varied considerably. However, were the parents to have all received the same parenting support, and been contactable again after the elapsed time, the stability and change of the constructs could have

been measured alongside the notification rates. The use of subsequent notification rate as the only outcome measure may have over-estimated actual maltreatment in some families while under-identifying others; the conclusions of the present study are only as accurate as the notifications were accurate indicators of harm. A larger, similar study with a non-biased sample selection method would allow for further testing of this study's findings.

8.7 Implications for research

Several veins of future enquiry emerged from this study's findings and can be placed in two groups. Ideally, a future study would address the limitations of the present study, but there are also larger implications challenging some of the current approaches to research in this field.

8.7.1 Future studies similar to the present study

Further studies on PCA and decision-making should ensure that measures are reliable and valid for CPS-involved parents who are undergoing PCA. If questionnaires, observational procedures or interviews elicit inaccurate information from participants, then conclusions based on their results will be meaningless. There is a need to measure constructs such as emotional regulation, for example, but self-report psychometric questionnaires are inadequate for the desired purpose. Future researchers could use collateral informants alongside parent-report to provide a second information source. Services involved with the family (but not CPS) would be ideally placed to provide this information, as they have multiple interactions with parents over time and observe behaviour across different settings. Having full buy-in from staff members would be necessary, however, as there is a tendency for frontline staff to ally with clients and some may not be willing to provide critical feedback (Damiani-Taraba et al., 2017).

Using a formal measure of adverse childhood experiences (ACEs) would allow for a closer comparison with other studies, as would a well-established trauma measure (Briere,

2004; Felitti et al., 1998). Given the significance of trauma-related reflective functioning for parenting, there is a need to develop reliable and valid measurement procedures for conversational markers of unresolved trauma that are able to be used by clinicians in the field as well as researchers (Berthelot et al., 2015). This has been operationalised within the AAI, but is not known to be used in other interview-based measures and is restricted to those who have undergone rigorous training. The development and initial validation of the Parental Reflective Functioning Questionnaire provides researchers with a self-report tool with encouraging psychometric properties, but it remains to be seen whether this is reliable when administered with CPS-involved parents (Luyten et al., 2017).

Further research should more closely examine the role that parental awareness of one's own and one's child's emotions plays among CPS-involved parents. While it is not a signal on its own for subsequent harm, parental sensitivity is likely to interact with other contextual risk factors that may increase or decrease risk for a particular parent. Recently, parental sensitivity has also been shown to improve following intervention in a group of CPS-referred parents who had experienced child physical abuse, although whether this was accompanied by a drop in harmful parenting was not studied (Pasalich, Fleming, Spieker, Lohr, & Oxford, 2019). Parental emotional awareness and sensitivity should be explored as a mediating factor between prior maltreatment history, current contextual stressors and subsequent harmful or protective parenting, building on the existing body of knowledge in this field (e.g. Ensink et al., 2019; Moss et al., 2011; Skowron et al., 2013; Skowron et al., 2010).

8.7.2 Decision-making in child protection: the need to establish current decision-making quality

This study focused on accuracy of assessment in the context of child welfare, but analysis of the decision-making *process* is the second dimension along which decision-making can be

evaluated (López et al., 2015). Prior research conducted regarding process issues in child protection indicates that there is considerable variation in the quality of PCA (Budd et al., 2001; Freedle & Zelechowski, 2015). While this study did not address this within an Aotearoa/NZ context, it is a field fraught with tension both here and internationally (Fluke et al., 2016; Keddell, 2017). Regardless of ideology, family preservation and social justice advocates, as well as risk-averse government departments, have the same stated goal of reducing rates of child maltreatment. Increased accuracy in decision-making could be seen to meet the demands of both ends of the family harm/risk management paradigm: it would reduce the inequalities within existing systems and would also direct the most intensive intervention to those that need it the most. Yet, deciding on what constitutes a ‘good’ decision is not straightforward; it depends on determining both the least-harmful option and the point in time at which a decision should be evaluated. One way to address this could be to systematically link administrative data to assessments that are currently being completed through CPS, and establish further methods for measuring actual harm experienced by the child over time. In this way, common PCA components could be tested for their predictive validity for this population, building a foundation of evidence regarding current approaches.

8.7.3 Feasibility issues

Conducting research in the field of child protection is challenging, and for this study there were no prior established relationships between OT and the university in which the research was undertaken. The nature of the study was considered high-risk and this necessitated a range of full approvals processes with: one government ministry, seven NGOs, two cultural consultation groups, the national body overseeing health research (HDEC), the local health board and the usual university-based ethics committee. While none of these processes constituted an ultimate barrier to feasibility, each individual process took time varying from a few weeks to a full year and not all could be completed concurrently. In the case of OT, 23

months elapsed while waiting for approvals and delivery of agreed data – a severe logistical challenge for a doctoral study timeframe. The initial application was lost and had to be re-submitted during this time, and the final delivered dataset was only a portion of what was requested and had been promised. This illustrates why high-quality, independent research might not be attempted with CPS-involved parents, despite research collaboration being a stated aim of services.

It was expected that reluctance or mistrust on the part of the potential participants would constitute the greatest challenge to recruitment, but this was not found to be the case. The participants themselves were in support of this research being conducted, standing in contrast to the professionals who were asked to facilitate access to the research project. An organisational and professional attitude of risk aversion, combined with lengthy administrative processes, put the brakes on the project. For further and larger research projects in this field to be conducted in Aotearoa/NZ, especially those requiring administrative CPS data, these challenges need to be addressed. Most governments aim to implement evidence-based practices within their services. Delays and barriers such as those described above reduce the likelihood of good-quality research being undertaken. This in turn reduces the evidence base upon which decision-making is made, meaning that ‘better practice’ remains elusive. At the same time, current decision-making practices prevail and are not based on evidence. Were a ‘high-trust’ research environment to be developed, where CPS partnered with university researchers, there would be immense potential to build a robust, local evidence base. In turn, the quality of PCA and decision-making would improve.

Governments and child protection agencies have a strong interest in reducing child maltreatment rates. The benefits to children themselves are clear, and any reduction would also lead to lower rates of subsequent problems in adulthood associated with child maltreatment. Thus, in addition to the ethical imperative to address this problem, there would

be a lightened economic burden (Ferrara et al., 2015; Gilbert, Widom, et al., 2009). As such, independent research that contributes towards this goal should ideally be supported and facilitated by government. Currently, OT are implementing intensive intervention services aimed at families with children who are at risk of being taken into OOHC (Kenny & Ensor, 2019). Approaches should be carefully evaluated for effectiveness by independent researchers, adding to the local understanding but also contributing towards the international body of research in this field. Government departments exist with tension: there is pressure to manage public perception of competence, but to improve effectiveness CPS need to increase their transparency.

In Aotearoa/NZ, monitoring systems and formal facilitated communication among agencies have been trialled with the goal to decrease family harm. The Integrated Safety Response programme is a collaboration between the Police, the NGO sector and government agencies, and has shown promising results so far, and provides a supplementary source of information that could be used alongside notification data and progress in treatment to address the problem of notifications being the only proxy indicator of actual harm (Mossman, Paulin, & Wehipeihana, 2017). These data are already being collected; senior officials should consider using currently-available tools and systems for research purposes.

8.7.4 Further research questions

Assessment of parental functioning in this study failed identify to any psychological characteristics that were strongly predictive of subsequent maltreatment. PCA that include parenting capacity-to-change approaches, such as those outlined by Platt and Riches (2016), have not yet been evaluated. Given the lack of evidence for predictive accuracy in any model so far, and the need for PCAs to accurately identify which parents are likely to change and which children may be in need of OOHC, this should be a research priority. In the meantime, a retrospective longitudinal study could be completed on completed PCAs linked with

subsequent maltreatment outcomes, where children were placed in the care of their parents.

Thus two further research questions emerge:

1. What were the factors associated with subsequent maltreatment notifications among parents who undertook a PCA and whose children remained in their care?
2. What are the placement permanency and notification outcomes following PCA, when the PCA included measures of parental response-to-intervention over a specific time?

With regard to furthering the findings from the present study, notification data from two years and five years post-assessment will become available in due course. This will provide opportunities to analyse longer-term trends among the present study's participant cohort.

8.8 Implications for practice

Psychologists and social workers undertaking PCA for CPS or family courts should be aware of the limitations of the methods they use for the population they are serving, particularly if those methods include self-report questionnaires. Current practice consists, for the most part, of gathering information from multiple sources to form an overall estimation of protective and risk factors for a particular parent or family. While there are some documents providing a general consensus on what constitutes a high-quality PCA report, the relative importance of each area covered is not known and is generally left up to interpretation and analysis on the part of the assessor (O'Neill, Bussey, Lennings, & Seidler, 2018). One key finding from this study (and other studies relevant to practice) is that attachment measures may yield relevant information about parent-child relationships, but attachment classifications are not necessarily predictive of subsequent harmful parenting (Granqvist et al., 2017). Furthermore, a parent's level of insight or reflective functioning, while it may be associated with less-than-optimum parenting behaviour and sensitivity, should not be interpreted in isolation from other assessment domains. Interviews and observations, alongside collateral sources, remain the most robust assessment methods.

Previous research shows that decisions about child placement are not made in a vacuum; clinicians and systems are susceptible to multiple influences (Keddell et al., 2019; Lauritzen et al., 2018). No information gathered is a fully complete picture of parenting capacity, and every assessment includes domains of functioning both known and unknown. Current ‘best practices’ have not yet been evaluated for their predictive accuracy. However, PCAs remain an essential part of practice in child welfare, with courts and CPS relying heavily on specialised, cross-sectional assessments for high-stakes decisions about children’s futures (O’Neill et al., 2018; Ward et al., 2014). Thus, the most practical approach when presented with parents who have harmed their children is to, in addition to assessing key areas of parenting capacity, assess their capacity to change within a timeframe that is developmentally-appropriate for their child (Brown & Ward, 2014). The evidence so far suggests that there are very few parenting interventions that have been shown to reduce subsequent maltreatment in parents who have involvement with CPS, and parents cannot be expected to improve drastically following attendance at a generic parenting programme (Barlow et al., 2006). A systematic and time-limited approach to establishing a parent’s capacity to improve when provided with support, and to sustain those improvements, is likely to be the safest approach for children. An individualised set of goals and behaviours related to the specific problem areas gives the parent some agency over the process and outcome (Harnett & Dawe, 2008; Platt & Riches, 2016b; Ward et al., 2014). The advantages of this approach include: evidence being gathered that is directly relevant to the individual case; parents having explicit behaviour change goals; and CPS having a structured process to follow which gives some time for concurrent planning towards permanency to occur. There are also potential risks, in that parents may improve in the short term and deteriorate immediately following the withdrawal of CPS supports. In cases where notifications occur

closely following a placement decision, CPS should invoke higher-intensity investigation and intervention processes.

8.9 Conclusion

This was the first study to empirically measure baseline psychological and parenting characteristics of high-risk CPS-involved parents, followed by longitudinal measurement of subsequent child protection and entry into care events. The feasibility of undertaking comprehensive assessment procedures with a high-risk sample was demonstrated, and the low attrition rates highlight the acceptability of the study methods. It included a wide range of information provided from direct observation, an independent parental RF coder and the parent themselves.

This study adds useful knowledge to the field of parenting capacity assessment in the context of maltreatment. It answers questions regarding the accuracy of some aspects of current practice and generates questions for future research. The initial research question was answered: in this study there were no psychological characteristics that predicted subsequent maltreatment notifications among a group of CPS-involved families. Self-report measures are not useful for PCA. Areas to research further include: the role that parental ‘awareness of the child’ plays in CPS-involved families; whether parental sensitivity and emotional awareness interacts with other factors to increase or decrease maltreatment risk; the predictive accuracy of past PCA reports for child maltreatment; and, the evaluation of PCAs that include response-to-treatment models for suitability in the field of child protection. Decision-making in child welfare is indeed fraught with what is ultimately the highest risk for children, and it is essential that professionals and researchers engage critically with this challenge.

References

- Afifi, T. O., & MacMillan, H. L. (2011). Resilience following child maltreatment: A review of protective factors. *The Canadian Journal of Psychiatry*, 56(5), 266-272.
<https://doi.org/10.1177/070674371105600505>
- Ainsworth, M. D. (1978). *Patterns of attachment: A psychological study of the strange situation*. New York; Hillsdale, N.J: Lawrence Erlbaum Associates.
- Akoglu, H. (2018). User's guide to correlation coefficients. *Turkish Journal of Emergency Medicine*, 18(3), 91-93. <https://doi.org/10.1016/j.tjem.2018.08.001>
- Álvarez, M., Rodrigo, M. J., & Byrne, S. (2018). What implementation components predict positive outcomes in a parenting program? *Research on Social Work Practice*, 28(2), 173-187. <https://doi.org/10.1177/1049731516640903>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5* (Fifth ed.). Arlington, VA: American Psychiatric Association.
- Antonsen, B. T., Johansen, M. S., Rø, F. G., Kvarstein, E. H., & Wilberg, T. (2015). Is reflective functioning associated with clinical symptoms and long-term course in patients with personality disorders? *Comprehensive Psychiatry*, 64, 46-58.
<https://doi.org/10.1016/j.comppsy.2015.05.016>
- Arad, B. D., & Wozner, Y. (2001). The least detrimental alternative: Deciding whether to remove children at risk from their homes. *International Social Work*, 44(2), 229-239.
<https://doi.org/10.1177/002087280104400207>
- Azar, S. T., Lauretti, A. F., & Loding, B. V. (1998). The evaluation of parental fitness in termination of parental rights cases: A functional-contextual perspective. *Clinical Child and Family Psychology Review*, 1(2), 77-100.

- Babor, T. F., Higgins-Biddle, J. C., Saunders, J. B., & Monteiro, M. G. (2001). *AUDIT: The Alcohol Use Disorders Identification Test guidelines for use in primary care*. World Health Organisation.
- Bakermans-Kranenburg, M. J., van IJzendoorn, M. H., & Juffer, F. (2003). Less is more: Meta-analyses of sensitivity and attachment interventions in early childhood. *Psychological Bulletin*, 129(2), 195-215.
- Bariola, E., Hughes, E. K., & Gullone, E. (2012). Relationships between parent and child emotion regulation strategy use: A brief report. *Journal of Child and Family Studies*, 21(3), 443-448. <https://doi.org/10.1007/s10826-011-9497-5>
- Barlow, J., Johnston, I., Kendrick, D., Polnay, L., & Stewart-Brown, S. (2006). Individual and group-based parenting programmes for the treatment of physical child abuse and neglect. *Cochrane Database of Systematic Reviews (Online)*, 3(3), CD005463. <https://doi.org/10.1002/14651858.CD005463.pub2>
- Barlow, J., Sembi, S., Parsons, H., Kim, S., Petrou, S., Harnett, P., & Dawe, S. (2019). A randomized controlled trial and economic evaluation of the Parents Under Pressure program for parents in substance abuse treatment. *Drug and Alcohol Dependence*, 194, 184-194. <https://doi.org/10.1016/j.drugalcdep.2018.08.044>
- Barnum, R. (1997). A suggested framework for forensic consultation in cases of child abuse and neglect. *Journal of the American Academy of Psychiatry and the Law Online*, 25(4), 581-593.
- Barratt, S. (2010). Test of time: Children who wait (1973) by Jane Rowe and Lydia Lambert. *Clinical Child Psychology and Psychiatry*, 15(4), 627-631. <https://doi.org/10.1177/1359104510379171>

- Beddoe, L. (2019). The spotlight is on us - an apology is due. Retrieved from <http://www.reimaginingsocialwork.nz/2019/06/the-spotlight-is-on-us-an-apology-is-due/#more-3201>
- Ben-Arieh, A. (2010). Localities, social services and child abuse: The role of community characteristics in social services allocation and child abuse reporting. *Children and Youth Services Review*, 32(4), 536-543.
<https://doi.org/10.1016/j.childyouth.2009.11.006>
- Benbenishty, R., Davidson-Arad, B., López, M., Devaney, J., Spratt, T., Koopmans, C., . . . Hayes, D. (2015). Decision making in child protection: An international comparative study on maltreatment substantiation, risk assessment and interventions recommendations, and the role of professionals' child welfare attitudes. *Child Abuse & Neglect*, 49, 63-75. <https://doi.org/10.1016/j.chiabu.2015.03.015>
- Benoit, D., Zeanah, C. H., Parker, K., Nicholson, E., & Coolbear, J. (1997). "Working model of the child interview": Infant clinical status related to maternal perceptions. *Infant Mental Health Journal*, 18(1), 107-121.
- Benton, D. M., Deering, D. E. A., & Adamson, S. J. (2012). Treating co-occurring posttraumatic stress disorder and substance use disorders in an outpatient setting in New Zealand. *New Zealand Journal of Psychology*, 41(1), 30-37.
- Berliner, L., Fitzgerald, M. M., Dorsey, S., Chaffin, M., Ondersma, S. J., & Wilson, C. (2015). Report of the APSAC Task Force on evidence-based service planning guidelines for child welfare. *Child Maltreatment*, 20(1), 6-16.
<https://doi.org/10.1177/1077559514562066>
- Berthelot, N., Ensink, K., Bernazzani, O., Normandin, L., Luyten, P., & Fonagy, P. (2015). Intergenerational transmission of attachment in abused and neglected mothers: The

- role of trauma-specific reflective functioning. *Infant Mental Health Journal*, 36(2), 200-212. <https://doi.org/10.1002/imhj.21499>
- Biehal, N., Baldwin, H., Cusworth, L., Wade, J., & Allgar, V. (2018). In-home support or out of home care? Thresholds for intervention with abused and neglected children. *Children and Youth Services Review*, 89, 263-271. <https://doi.org/10.1016/j.childyouth.2018.04.041>
- Blampied, N. (2013). Single-case research designs and the scientist-practitioner ideal in applied psychology. In G. J. Madden (Ed.), *APA handbook of behavior analysis: Volume 1 methods and principles*. (pp. 177 – 197).
- Boeckel, M. G., Wagner, A., & Grassi-Oliveira, R. (2017). The effects of intimate partner violence exposure on the maternal bond and PTSD symptoms of children. *Journal of Interpersonal Violence*, 32, 1127-1142. <https://doi.org/10.1177/0886260515587667>
- Bolton, A., & Lennings, C. (2010). Clinical opinions of structured risk assessments for forensic child protection: The development of a clinically relevant device. *Children and Youth Services Review*, 32(10), 1300-1310. <https://doi.org/10.1016/j.childyouth.2010.04.022>
- Borelli, J., Goshin, L., Joestl, S., Clark, J., & Byrne, M. (2010). Attachment organization in a sample of incarcerated mothers: Distribution of classifications and associations with substance abuse history, depressive symptoms, perceptions of parenting competency and social support. *Attachment & Human Development*, 12(4), 355-374. <https://doi.org/10.1080/14616730903416971>
- Bornstein, M. H. (2012). Cultural approaches to parenting. *Parenting, Science and Practice*, 12(2-3), 212-221. <https://doi.org/10.1080/15295192.2012.683359>
- Bowlby, J. (1982). Attachment & Loss. *American Journal of Orthopsychiatry*, 52, 664-678.

- Briere, J. (2004). *Psychological assessment of adult posttraumatic states: Phenomenology, diagnosis and measurement* (2 ed.): American Psychological Association.
- Brown, R., & Ward, H. (2014). Cumulative jeopardy: How professional responses to evidence of abuse and neglect further jeopardise children's life chances by being out of kilter with timeframes for early childhood development. *Children and Youth Services Review*, 47, 260-267. <https://doi.org/10.1016/j.chidyouth.2014.09.017>
- Browne, K. (1995). Predicting maltreatment. In P. Reder & C. Lucey (Eds.), *The assessment of parenting* (pp. 118-135). London: Routledge.
- Bruggink, A., Huisman, S., Vuijk, R., Kraaij, V., & Garnefski, N. (2016). Cognitive emotion regulation, anxiety and depression in adults with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 22, 34-44. <https://doi.org/10.1016/j.rasd.2015.11.003>
- Bryce, I. (2018). A review of cumulative harm: A comparison of international child protection practices. *Children Australia*, 43(1), 23-31. <https://doi.org/10.1017/cha.2018.3>
- Budd, K. S. (2005). Assessing parenting capacity in a child welfare context. *Children and Youth Services Review*, 27(4), 429-444. <https://doi.org/10.1016/j.chidyouth.2004.11.008>
- Budd, K. S., Felix, E. D., Sweet, S. C., Saul, A., & Carleton, R. A. (2006). Evaluating parents in child protection decisions: An innovative court-based clinic model. *Professional Psychology: Research and Practice*, 37(6), 666-675. <https://doi.org/10.1037/0735-7028.37.6.666>
- Budd, K. S., Poindexter, L. M., Felix, E. D., & Naik-Polan, A. T. (2001). Clinical assessment of parents in child protection cases: An empirical analysis. *Law and Human Behavior*, 25(1), 93-108. <https://doi.org/10.1023/A:1005696026973>

- Büyüköztürk, Ş., & Çokluk-Bökeoğlu, Ö. (2008). Discriminant function analysis: Concept and application. *Egitim Arastirmalari - Eurasian Journal of Educational Research*(33), 73-92.
- Bybee, D. (1985). *The family diversion project: Experimental evaluation of an intervention for abusing and neglecting families*. Department of Psychology. Michagan State University, Michagan.
- Carr, G., Moretti, M., & Cue, B. (2005). Evaluating parenting capacity: Validity problems with the MMPI-2, PAI, CAPI, and ratings of child adjustment. *Professional Psychology: Research and Practice*, 36(2), 188-196.
- Casanueva, C., Cross, T. P., Ringeisen, H., & Christ, S. L. (2011). Prevalence, trajectories, and risk factors for depression among caregivers of young children involved in child maltreatment investigations. *Journal of Emotional and Behavioral Disorders*, 19(2), 98-116. <https://doi.org/10.1177/1063426609354106>
- Chaffin, M., Funderburk, B., Valle, L., & Gurwitch, R. (2011). A combined motivation and parent-child interaction therapy package reduces child welfare recidivism in a randomized dismantling field trial. *Journal of Consulting and Clinical Psychology*, 79(1), 84-95. <https://doi.org/10.1037/a0021227>
- Chaffin, M., Hecht, D., Bard, D., Silovsky, J., & Beasley, W. (2012). A statewide trial of the safecare home-based services model with parents in child protective services. *Pediatrics*, 129(3), 509-515. <https://doi.org/10.1542/peds.2011-1840>
- Chaffin, M., Silovsky, J. F., Funderburk, B., Valle, L., Brestan, E. V., Balachova, T., . . . Bonner, B. L. (2004). Parent-Child Interaction Therapy with physically abusive parents: efficacy for reducing future abuse reports. *Journal of Consulting and Clinical Psychology*, 72(3), 500-510. <https://doi.org/10.1037/0022-006X.72.3.500>

- Chambless, D. L., & Hollon, S. D. (1998). Defining empirically supported therapies. *Journal of Consulting and Clinical Psychology*, 66(1), 7-18. <https://doi.org/10.1037//0022-006X.66.1.7>
- Chen, H., Cohen, P., & Chen, S. (2010, 2010/03/31). How big is a big odds ratio? Interpreting the magnitudes of odds ratios in epidemiological studies. *Communications in Statistics - Simulation and Computation*, 39(4), 860-864. <https://doi.org/10.1080/03610911003650383>
- Chen, M., & Chan, K. L. (2016). Effects of parenting programs on child maltreatment prevention: A meta-analysis. *Trauma, Violence, & Abuse*, 17(1), 88-104. <https://doi.org/10.1177/1524838014566718>
- Chiesa, M., & Fonagy, P. (2014). Reflective function as a mediator between childhood adversity, personality disorder and symptom distress. *Personality and Mental Health*, 8(1), 52-66. <https://doi.org/10.1002/pmh.1245>
- Choate, P. (2009). Parenting capacity assessments in child protection cases. *Forensic Examiner*, 18(1), 52-60.
- Choate, P., & Lindstrom, G. (2017). Parenting aapacity assessment as a colonial strategy. *Canadian Family Law Quarterly*, 37(1), 41-60.
- Chris Fraley, R., & Spieker, S. J. (2003). Are Infant Attachment Patterns Continuously or Categorically Distributed? A Taxometric Analysis of Strange Situation Behavior. *Developmental Psychology*, 39(3), 387-404. <https://doi.org/10.1037/0012-1649.39.3.387>
- Chu, D. A., Williams, L. M., Harris, A. W. F., Bryant, R. A., & Gatt, J. M. (2012). Early life trauma predicts self-reported levels of depressive and anxiety symptoms in nonclinical community adults: Relative contributions of early life stressor types and

- adult trauma exposure. *Journal of Psychiatric Research*, 47(1), 23-32.
- <https://doi.org/10.1016/j.jpsychires.2012.08.006>
- Cicchetti, D., & Doyle, C. (2016). Child maltreatment, attachment and psychopathology: Mediating relations. *World psychiatry: Official Journal of the World Psychiatric Association (WPA)*, 15(2), 89-90. <https://doi.org/10.1002/wps.20337>
- Cicchetti, D., Toth, S. L., & Lynch, M. (2013). Bowlby's dream comes full circle: The application of attachment theory to risk and psychopathology. In T. H. Ollendick & R. J. Prinz (Eds.), *Advances in Clinical Child Psychology* (pp. 1-36): Springer Science and Business Media.
- Cicchetti, D., Toth, S. L., & Maughan, A. (2000). An ecological–transactional model of child maltreatment. In A. Sameroff, M. Lewis, & S. Miller (Eds.), *Handbook of developmental psychopathology, 2nd ed.* (pp. 689-722). Dordrecht, Netherlands: Kluwer Academic Publishers.
- Clark, J. R., Connell, M., & Budd, K. S. (2013). Evaluation of parenting capacity in child protection matters. In R. Roesch & P. A. Zapf (Eds.), *Forensic assessments in criminal and civil law: A handbook for lawyers.* (pp. 264-279). New York, NY: Oxford University Press.
- Cole, P. M., Llera, S. J., & Pemberton, C. K. (2009). Emotional instability, poor emotional awareness, and the development of borderline personality. *Development and Psychopathology*, 21(4), 1293-1310. <https://doi.org/10.1017/S0954579409990162>
- Conley, C. (2003). A review of parenting capacity assessment reports. *Journal of the Ontario Association of Children's Aid Societies*, 47, 16-23.
- Connelly, M., & Doolan, M. (2007). *Lives cut short: Child death by maltreatment.* Wellington: Office of the Children's Commissioner.

- Cooke, J. E., Racine, N., Plamondon, A., Tough, S., & Madigan, S. (2019). Maternal adverse childhood experiences, attachment style, and mental health: Pathways of transmission to child behavior problems. *Child Abuse & Neglect*, 93, 27-37.
<https://doi.org/10.1016/j.chiabu.2019.04.011>
- Costello, A. H., & McNeil, C. B. (2014). Differentiating parents with faking-good profiles from parents with valid scores on the Child Abuse Potential Inventory. *Journal of Family Violence*, 29(1), 79-88. <https://doi.org/10.1007/s10896-013-9557-2>
- Cowell, R. A., Cicchetti, D., Rogosch, F. A., & Toth, S. L. (2015). Childhood maltreatment and its effect on neurocognitive functioning: Timing and chronicity matter. *Development and Psychopathology*, 27(2), 521-533.
<https://doi.org/10.1017/S0954579415000139>
- Cram, F., Gulliver, P., Ota, R., & Wilson, M. (2015). Understanding overrepresentation of indigenous children in child welfare data: An application of the drake risk and bias models. *Child Maltreatment*, 20(3), 170-182.
<https://doi.org/10.1177/1077559515580392>
- Crandall, A., Deater-Deckard, K., & Riley, A. W. (2015). Maternal emotion and cognitive control capacities and parenting: A conceptual framework. *Developmental Review*, 36, 105-126. <https://doi.org/10.1016/j.dr.2015.01.004>
- Crawford, J. R., & Henry, J. D. (2003). The Depression Anxiety Stress Scales (DASS): Normative data and latent structure in a large non-clinical sample. *British Journal of Clinical Psychology*, 42(2), 111-131. <https://doi.org/10.1348/014466503321903544>
- Crengle, S. (2000). The development of Māori primary care services. *Pacific Health Dialog*, 7(1), 48-53.
- Crncec, R., Barnett, B., & Matthey, S. (2010). Review of scales of parenting confidence. *Journal of Nursing Measurement*, 18(3), 210-240.

- Crowell, J. A., & Feldman, S. S. (1988). Mothers' internal models of relationships and children's behavioral and developmental Status: A study of mother-child interaction. *Child Development*, 59(5), 1273-1285. <https://doi.org/10.1111/j.1467-8624.1988.tb01496.x>
- Curtis, C. (2009). Limits of parenting capacity assessments in child protection cases. *Canadian Family Law Quarterly*, 28(1), 1-23.
- Cuschieri, S. (2019). The STROBE guidelines. *Saudi Journal of Anaesthesia*, 13(Suppl 1), S31-S34. https://doi.org/10.4103/sja.SJA_543_18
- CYF. (2014). Care and Protection reports of concern requiring further action and substantiated abuse. Retrieved 16th June, 2015, from <http://www.cyf.govt.nz/about-us/key-statistics/care-and-protection-reports-of-concern-requiring-further-action-and-substantiated-abuse.html>
- Damiani-Taraba, G., Dumbrill, G., Gladstone, J., Koster, A., Leslie, B., & Charles, M. (2017). The evolving relationship between casework skills, engagement, and positive case outcomes in child protection: A structural equation model. *Children and Youth Services Review*, 79, 456-462. <https://doi.org/10.1016/j.childyouth.2017.05.033>
- Daughters, S. B., Gorka, S. M., Rutherford, H. J. V., & Mayes, L. C. (2014). Maternal and adolescent distress tolerance: The moderating role of gender. *Emotion*, 14(2), 416–424. <https://doi.org/10.1037/a0034991>
- De Bellis, M. D., Broussard, E. R., Herring, D. J., Wexler, S., Moritz, G., & Benitez, J. G. (2001). Psychiatric co-morbidity in caregivers and children involved in maltreatment: a pilot research study with policy implications. *Child Abuse & Neglect*, 25(7), 923-944. [https://doi.org/10.1016/S0145-2134\(01\)00247-2](https://doi.org/10.1016/S0145-2134(01)00247-2)
- de Kwaadsteniet, L., Bartelink, C., Witteman, C., ten Berge, I., & van Yperen, T. (2013). Improved decision making about suspected child maltreatment: Results of structuring

- the decision process. *Children and Youth Services Review*, 35(2), 347-352.
<https://doi.org/10.1016/j.chilyouth.2012.11.015>
- De Menezes, M. C., Bedeschi, L. B., Dos Santos, L. C., & Lopes, A. C. S. (2016). Interventions directed at eating habits and physical activity using the transtheoretical model: A systematic review. *Nutricion Hospitalaria*, 33(5), 1194-1204.
<https://doi.org/10.20960/nh.586>
- Deady, M. (2009, 01/01). A review of screening, assessment and outcome measures for drug and alcohol settings.
- Debowska, A., Willmott, D., Boduszek, D., & Jones, A. D. (2017). What do we know about child abuse and neglect patterns of co-occurrence? A systematic review of profiling studies and recommendations for future research. *Child Abuse & Neglect*, 70, 100-111. <https://doi.org/10.1016/j.chiabu.2017.06.014>
- Deitrich-MacLean, G., & Walden, T. (1988). Distinguishing teaching interactions of physically abusive from nonabusive parent-child dyads. *Child Abuse & Neglect*, 12(4), 469-479. [https://doi.org/10.1016/0145-2134\(88\)90064-6](https://doi.org/10.1016/0145-2134(88)90064-6)
- Delfabbro, P., Borgas, M., Rogers, N., Jeffreys, H., & Wilson, R. (2009, 2//). The social and family backgrounds of infants in South Australian out-of-home care 2000–2005: Predictors of subsequent abuse notifications. *Children and Youth Services Review*, 31(2), 219-226. <https://doi.org/http://dx.doi.org/10.1016/j.chilyouth.2008.07.023>
- Demers, I., Bernier, A., Tarabulsky, G. M., & Provost, M. A. (2010). Mind-mindedness in adult and adolescent mothers: Relations to maternal sensitivity and infant attachment. *International Journal of Behavioral Development*, 34(6), 529-537.
<https://doi.org/10.1177/0165025410365802>

- Doidge, J. C., Higgins, D. J., Delfabbro, P., Edwards, B., Vassallo, S., Toumbourou, J. W., & Segal, L. (2017). Economic predictors of child maltreatment in an Australian population-based birth cohort. *Children and Youth Services Review*, 72, 14.
- Doidge, J. C., Higgins, D. J., Delfabbro, P., & Segal, L. (2016). Risk factors for child maltreatment in an Australian population-based birth cohort. *Child Abuse & Neglect*, 64(Feb 2017), 47-60. <https://doi.org/10.1016/j.chiabu.2016.12.002>
- Donald, T., & Jureidini, J. (2004). Parenting capacity. *Child Abuse Review*, 13(1), 5-17. <https://doi.org/10.1002/car.827>
- Dozier, M., & Lindhiem, O. (2006). This is my child: Differences among foster parents in commitment to their young children. *Child Maltreatment*, 11(4), 338-345. <https://doi.org/10.1177/1077559506291263>
- Dyson, R. H. (2007). Innovative family decision making. *Social Work Now* (36), 4-7.
- Edwards, K. M., Probst, D. R., Rodenhizer-Stämpfli, K. A., Gidycz, C. A., & Tansill, E. C. (2014). Multiplicity of child maltreatment and biopsychosocial outcomes in young adulthood: The moderating role of resiliency characteristics among female survivors. *Child Maltreatment*, 19(3-4), 188-198. <https://doi.org/10.1177/1077559514543354>
- Elder, H. (2019). Oranga Tamariki is doing more harm than good. *Stuff.co.nz*. Retrieved from <https://www.stuff.co.nz/national/112713542/oranga-tamariki-is-doing-more-harm-than-good>
- Elliot, R.-L., Campbell, L., Hunter, M., Cooper, G., Melville, J., McCabe, K., . . . Loughland, C. (2014). When I look into my baby's eyes: Emotion recognition of infant faces by mothers with Borderline Personality Disorder. *Infant Mental Health Journal*, 35(1), 21-32. <https://doi.org/10.1002/imhj.21426>
- Enebrink, P., Björnsdotter, A., Ghaderi, A., Institutionen för, p., Humanistisk-samhällsvetenskapliga, v., Uppsala, u., & Samhällsvetenskapliga, f. (2013). The

- Emotion Regulation Questionnaire: Psychometric properties and norms for swedish parents of children aged 10-13 years. *Europe's Journal of Psychology*, 9(2), 289-303.
<https://doi.org/10.5964/ejop.v9i2.535>
- Ensink, K., Berthelot, N., Bernazzani, O., Normandin, L., & Fonagy, P. (2014). Another step closer to measuring the ghosts in the nursery: preliminary validation of the Trauma Reflective Functioning Scale. *Frontiers in Psychology*, 5.
<https://doi.org/10.3389/fpsyg.2014.01471>
- Ensink, K., Borelli, J., Roy, J., Normandin, L., Slade, A., & Fonagy, P. (2019). Costs of not getting to know you: Lower levels of parental reflective functioning confer risk for maternal insensitivity and insecure infant attachment. *Infancy*, 24(2), 210-227.
<https://doi.org/10.1111/infa.12263>
- Ethier, L. S., Couture, G., & Lacharité, C. (2004). Risk factors associated with the chronicity of high potential for child abuse and neglect. *Journal of Family Violence*, 19(1), 13-24. <https://doi.org/10.1023/B:JOFV.0000011579.18333.c9>
- Euser, S., Alink, L. R. A., Stoltenborgh, M., Bakermans-Kranenburg, M. J., & van Ijzendoorn, M. H. (2015). A gloomy picture: A meta-analysis of randomized controlled trials reveals disappointing effectiveness of programs aiming at preventing child maltreatment. *BMC Public Health*, 15(1), 1068. <https://doi.org/10.1186/s12889-015-2387-9>
- Eve, P. M., Byrne, M. K., & Gagliardi, C. R. (2014). What is good parenting? The perspectives of different professionals. *Family Court Review*, 52(1), 114-127.
<https://doi.org/10.1111/fcre.12074>
- Farnfield, S. (2008). A theoretical model for the comprehensive assessment of parenting. *The British Journal of Social Work*, 38(6), 1076-1099.
<https://doi.org/10.1093/bjsw/bcl395>

- Featherstone, B., Morris, K., Daniel, B., Bywaters, P., Brady, G., Bunting, L., . . . Mirza, N. (2019). Poverty, inequality, child abuse and neglect: Changing the conversation across the UK in child protection? *Children and Youth Services Review*, 97, 127-133. <https://doi.org/10.1016/j.childyouth.2017.06.009>
- Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., . . . Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The Adverse Childhood Experiences (ACE) study. *American Journal of Preventive Medicine*, 14(4), 245-258. [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)
- Fenerci, R. L. B., & DePrince, A. P. (2018). Intergenerational transmission of trauma: maternal trauma–related cognitions and toddler symptoms. *Child Maltreatment*, 23(2), 126-136. <https://doi.org/10.1177/1077559517737376>
- Fernandez, E., & Atwool, N. (2013). Child protection and out of home care: Policy, practice, and research connections Australia and New Zealand. *Colegio Oficial de Psicólogos de Madrid*, 22(3), 175-184. <https://doi.org/10.5093/in2013a21>
- Ferrara, P., Corsello, G., Basile, M. C., Nigri, L., Campanozzi, A., Ehrich, J., & Pettoello-Mantovani, M. (2015). The economic burden of child maltreatment in high income countries. *The Journal of Pediatrics*, 167(6), 1457-1459. <https://doi.org/https://doi.org/10.1016/j.jpeds.2015.09.044>
- Festinger, T. (1996). Going home and returning to foster care. *Children and Youth Services Review*, 18(4), 383-402. [https://doi.org/10.1016/0190-7409\(96\)00011-4](https://doi.org/10.1016/0190-7409(96)00011-4)
- Fluke, J. D., Corwin, T. W., Hollinshead, D. M., & Maher, E. J. (2016). Family preservation or child safety? Associations between child welfare workers' experience, position, and perspectives. *Children and Youth Services Review*, 69, 210-218. <https://doi.org/10.1016/j.childyouth.2016.08.012>

- Fluke, J. D., Shusterman, G. R., Hollinshead, D. M., & Yuan, Y.-Y. T. (2008, 2008/02/01). Longitudinal analysis of repeated child abuse reporting and victimization: multistate analysis of associated factors. *Child Maltreatment*, 13(1), 76-88.
<https://doi.org/10.1177/1077559507311517>
- Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of borderline personality disorder. *Development and Psychopathology*, 21(4), 1355-1381.
- Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant-mother relationships. *American Academy of Child Psychiatry*, 14, 387-421.
- Freedle, A., & Zelechowski, A. D. (2015). Parenting capacity evaluation in Poland: A descriptive analysis. *The International Journal of Forensic Mental Health*, 14(3), 181-192. <https://doi.org/10.1080/14999013.2015.1085925>
- Freisthler, B., Kepple, N. J., Wolf, J. P., Curry, S. R., & Gregoire, T. (2017). Substance use behaviors by parents and the decision to substantiate child physical abuse and neglect by caseworkers. *Children and Youth Services Review*, 79, 576-583.
<https://doi.org/10.1016/j.childyouth.2017.07.014>
- Fusco, R. A. (2015). Second generation mothers in the child welfare system: Factors that predict engagement. *Child and Adolescent Social Work Journal*, 32(6), 545-554.
<https://doi.org/10.1007/s10560-015-0394-4>
- Gabinet, L. (1979). MMPI profiles of high-risk and outpatient mothers. *Child Abuse & Neglect*, 3(1), 373-379. [https://doi.org/10.1016/0145-2134\(79\)90057-7](https://doi.org/10.1016/0145-2134(79)90057-7)
- Garnefski, N., & Kraaij, V. (2007). The cognitive emotion regulation questionnaire: Psychometric features and prospective relationships with depression and anxiety in

- adults. *European Journal of Psychological Assessment*, 23(3), 141-149.
<https://doi.org/10.1027/1015-5759.23.3.141>
- Geddis, D. C., Monaghan, S. M., Muir, R. C., & Jones, C. J. (1979). Early prediction in the maternity hospital — The queen mary child care unit. *Child Abuse & Neglect*, 3(3), 757-766. [https://doi.org/10.1016/0145-2134\(79\)90108-X](https://doi.org/10.1016/0145-2134(79)90108-X)
- George, C., Kaplan, N., & Main, M. (1985). *The Adult Attachment Interview*. University of California, Berkeley.
- Gershater-Molko, R. M., Lutzker, J. R., & Wesch, D. (2002). Using recidivism data to evaluate project safecare: teaching bonding, safety, and health care skills to parents. *Child Maltreatment*, 7(3), 277-285. <https://doi.org/10.1177/1077559502007003009>
- Gibaud-Wallston, J., & Wandersman, L. P. (1978). *Development and utility of the Parenting Sense of Competence Scale*. Paper presented at the American Psychological Association conference, Toronto.
- Gilbert, N., Parton, N., & Skivenes, M. (2011). *Child protection systems: international trends and orientations*. New York, NY: Oxford University Press.
- Gilbert, R., Kemp, A., Thoburn, J., Sidebotham, P., Radford, L., Glaser, D., & MacMillan, H. L. (2009). Child Maltreatment 2 Recognising and responding to child maltreatment. *The Lancet*, 373, 167-180. [https://doi.org/10.1016/S0140-6736\(08\)61707-9](https://doi.org/10.1016/S0140-6736(08)61707-9)
- Gilbert, R., Widom, C. S. P., Browne, K. P., Fergusson, D. P., Webb, E. F., & Janson, S. P. (2009). Burden and consequences of child maltreatment in high-income countries. *The Lancet*, 373(9657), 68-81. [https://doi.org/10.1016/S0140-6736\(08\)61706-7](https://doi.org/10.1016/S0140-6736(08)61706-7)
- Gillingham, P., Harnett, P., Healy, K., Lynch, D., & Tower, M. (2017). Decision making in child and family welfare: The role of tools and practice frameworks. *Children Australia*, 42(1), 49-56. <https://doi.org/10.1017/cha.2016.51>

- Gojman-de-Millán, S., & Millán, S. (2019). Mental collapse as "disorganized attachment": A dynamic understanding for clinicians. *International Forum of Psychoanalysis*, 28(3), 173-179. <https://doi.org/10.1080/0803706X.2017.1304655>
- Goldberg, A., & Blaauw, E. (2019). Parental substance use disorder and child abuse: risk factors for child maltreatment? *Psychiatry Psychology and Law*, 1-11. <https://doi.org/10.1080/13218719.2019.1664277>
- Goldberg, S., Benoit, D., Blokland, K., & Madigan, S. (2003). Atypical maternal behavior, maternal representations, and infant disorganized attachment. *Development and Psychopathology*, 15(2), 239-257. <https://doi.org/10.1017/S0954579403000130>
- Granqvist, P., Hesse, E., Fransson, M., Main, M., Hagekull, B., Bohlin, G., . . . Psykologiska, i. (2016). Prior participation in the strange situation and overstress jointly facilitate disorganized behaviours: implications for theory, research and practice. *Attachment & Human Development*, 18(3), 235-249. <https://doi.org/10.1080/14616734.2016.1151061>
- Granqvist, P., Sroufe, L. A., Dozier, M., Hesse, E., Steele, M., van Ijzendoorn, M., . . . Psykologiska, i. (2017). Disorganized attachment in infancy: a review of the phenomenon and its implications for clinicians and policy-makers. *Attachment & Human Development*, 19(6), 534-558. <https://doi.org/10.1080/14616734.2017.1354040>
- Gratz, Rosenthal, M. Z., Tull, M. T., Lejuez, C. W., & Gunderson, J. G. (2006). An experimental investigation of emotion dysregulation in borderline personality disorder. *Journal of Abnormal Psychology*, 115(4), 850-855. <https://doi.org/10.1037/0021-843X.115.4.850>
- Gratz, Tull, M. T., & Levy, R. (2014). Randomized controlled trial and uncontrolled 9-month follow-up of an adjunctive emotion regulation group therapy for deliberate self-harm

- among women with borderline personality disorder. *Psychological Medicine*, 44(10), 2099-2112. <https://doi.org/http://dx.doi.org/10.1017/S0033291713002134>
- Gratz, K., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41-54.
- Green, M. J., Lino, B. J., Hwang, E. J., Sparks, A., James, C., & Mitchell, P. B. (2011). Cognitive regulation of emotion in bipolar I disorder and unaffected biological relatives. *Acta Psychiatrica Scandinavica*, 124(4), 307-316. <https://doi.org/10.1111/j.1600-0447.2011.01718.x>
- Grienberger, J., Bernbach, E., Levy, D., Slade, A., & Locker, A. (2005). Maternal reflective functioning, attachment, and the transmission gap: A preliminary study. *Attachment & Human Development*, 7(3), 283-298. <https://doi.org/10.1080/14616730500245880>
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: implications for affect, relationships, and well-being. *Journal of Personality and Social Psychology*, 85(2), 348-362. <https://doi.org/10.1037/0022-3514.85.2.348>
- Guildford, J. (2019, 30.7.19). Christchurch Hands Off Our Tamariki protesters call for end to 'inhumane' uplifts. *The Press*. Retrieved from <https://www.stuff.co.nz/the-press/news/114627955/christchurch-hands-off-our-tamariki-protesters-call-for-end-to-inhumane-uplifts>
- Hakman, M., Chaffin, M., Funderburk, B., & Silovsky, J. F. (2009). Change trajectories for parent-child interaction sequences during parent-child interaction therapy for child physical abuse. *Child Abuse & Neglect*, 33(7), 461-470. <https://doi.org/10.1016/j.chiabu.2008.08.003>

- Hammond, I., Eastman, A. L., Leventhal, J. M., & Putnam-Hornstein, E. (2017). Maternal mental health disorders and reports to child protective services: A birth cohort study. *International Journal of Environmental Research and Public Health*, 14(11), 1320. <https://doi.org/10.3390/ijerph14111320>
- Hands off our Tamariki. (2019). Retrieved 11.9.19, from <https://www.handsoffourtamariki.org.nz/>
- Harel, G., & Finzi-Dottan, R. (2018). Childhood maltreatment and its effect on parenting among high-risk parents. *Journal of Child and Family Studies*, 27(5), 1513-1524. <https://doi.org/10.1007/s10826-017-0994-z>
- Harnett, P. H. (2007). A procedure for assessing parents' capacity for change in child protection cases. *Children and Youth Services Review*, 29(9), 1179-1188. <https://doi.org/10.1016/j.childyouth.2007.04.005>
- Harnett, P. H., & Dawe, S. (2008). Reducing child abuse potential in families identified by social services: implications for assessment and treatment. *Brief Treatment and Crisis Intervention*, 8(3), 226-235. <https://doi.org/10.1093/brief-treatment/mhn010>
- Haskett, M. E., Neupert, S. D., & Okado, Y. (2014). Factors associated with 3-Year stability and change in parenting behavior of abusive parents. *Journal of Child and Family Studies*, 23(2), 263-274. <https://doi.org/10.1007/s10826-013-9729-y>
- Haskett, M. E., Scott, S. S., Willoughby, M., Ahern, L., & Nears, K. (2006). The Parent Opinion Questionnaire and child vignettes for use with abusive parents: assessment of psychometric properties. *Journal of Family Violence*, 21(2), 137-151. <https://doi.org/10.1007/s10896-005-9010-2>
- Hegarty, K. L., O'Doherty, L. J., Gunn, J., Pierce, D., & Taft, A. J. (2008). A brief counselling intervention by health professionals utilising the 'readiness to change'

- concept for women experiencing intimate partner abuse: The weave project. *Journal of Family Studies*, 14(2-3), 376-388. <https://doi.org/10.5172/jfs.327.14.2-3.376>
- Hein, T. C., & Monk, C. S. (2017). Research review: Neural response to threat in children, adolescents, and adults after child maltreatment – a quantitative meta-analysis. *Journal of Child Psychology and Psychiatry*, 58(3), 222-230. <https://doi.org/10.1111/jcpp.12651>
- Higgins, M., & Meredith, P. (2011). *Ngā tamariki – Māori childhoods: Traditional Māori childhoods*. Online. Retrieved from <http://www.TeAra.govt.nz/en/nga-tamariki-maori-childhoods/page-1>
- Hildebrand, M. (2015, 2015/06/01/). The psychometric properties of the Drug Use Disorders Identification Test (DUDIT): A review of recent research. *Journal of Substance Abuse Treatment*, 53, 52-59. <https://doi.org/https://doi.org/10.1016/j.jsat.2015.01.008>
- Horwitz, S. M., Hurlburt, M. S., Cohen, S. D., Zhang, J., & Landsverk, J. (2011). Predictors of placement for children who initially remained in their homes after an investigation for abuse or neglect. *Child Abuse & Neglect*, 35(3), 188-198. <https://doi.org/10.1016/j.chiabu.2010.12.002>
- Hötzel, K., von Brachel, R., Schlossmacher, L., & Vocks, S. (2013). Assessing motivation to change in eating disorders: A systematic review. *Journal of Eating Disorders*, 1(1), 38. <https://doi.org/10.1186/2050-2974-1-38>
- Houston, S. (2016). Assessing parenting capacity in child protection: towards a knowledge-based model. *Child & Family Social Work*, 21(3), 347-357. <https://doi.org/10.1111/cfs.12151>
- Humphreys, C., Thiara, R. K., & Skamballis, A. (2011). Readiness to change: mother-child relationship and domestic violence intervention. *The British Journal of Social Work*, 41(1), 166-184. <https://doi.org/10.1093/bjsw/bcq046>

- Hurlburt, M. S., Nguyen, K., Reid, J., Webster-Stratton, C., & Zhang, J. (2013). Efficacy of the Incredible Years group parent program with families in Head Start who self-reported a history of child maltreatment. *Child Abuse and Neglect*, 37(8), 531-543.
<https://doi.org/10.1016/j.chiabu.2012.10.008>
- Hurley, K. D., Huscroft-D'Angelo, J., Trout, A., Griffith, A., & Epstein, M. (2014). Assessing parenting skills and attitudes: a review of the psychometrics of parenting measures. *Journal of Child and Family Studies*, 23(5), 812-823.
<https://doi.org/10.1007/s10826-013-9733-2>
- Hussey, J. M., Marshall, J. M., English, D. J., Knight, E. D., Lau, A. S., Dubowitz, H., & Kotch, J. B. (2005). Defining maltreatment according to substantiation: distinction without a difference? *Child Abuse & Neglect*, 29(5), 479-492.
<https://doi.org/https://doi.org/10.1016/j.chiabu.2003.12.005>
- Huth-Bocks, A., Stacks, A. M., Irwin, J. L., Muzik, M., Rosenblum, K. L., Beeghly, M., & Wong, K. (2014). Maternal reflective functioning among mothers with childhood maltreatment histories: Links to sensitive parenting and infant attachment security. *Attachment & Human Development*, 16(5), 515-533.
<https://doi.org/10.1080/14616734.2014.935452>
- Ijzendoorn, M. H., Bakermans, J. J. W., Steele, M., & Granqvist, P. (2018). Diagnostic use of Crittendenn's attachment measures in family court is not beyond a reasonable doubt. *Infant Mental Health Journal*, 39(6), 642-646. <https://doi.org/10.1002/imhj.21747>
- Jackson, Y., Gabrielli, J., Fleming, K., Tunno, A. M., & Makanui, P. K. (2014, 2014/07/01/). Untangling the relative contribution of maltreatment severity and frequency to type of behavioral outcome in foster youth. *Child Abuse & Neglect*, 38(7), 1147-1159.
<https://doi.org/https://doi.org/10.1016/j.chiabu.2014.01.008>

- Jacobsen, T., Miller, L. J., & Kirkwood, K. P. (1997). Assessing parenting competency in individuals with severe mental illness: A comprehensive service. *The Journal of Mental Health Administration*, 24(2), 189-199. <https://doi.org/10.1007/BF02898513>
- Jedwab, M., Harrington, D., & Dubowitz, H. (2017). Predictors of substantiated re-reports in a sample of children with initial unsubstantiated reports. *Child Abuse & Neglect*, 69, 232-241. <https://doi.org/https://doi.org/10.1016/j.chiabu.2017.04.031>
- Jenkins, B. Q., Tilbury, C., Hayes, H., & Mazerolle, P. (2018). Factors associated with child protection recurrence in Australia. *Child Abuse & Neglect*, 81, 181-191. <https://doi.org/https://doi.org/10.1016/j.chiabu.2018.05.002>
- Jenkins, B. Q., Tilbury, C., Mazerolle, P., & Hayes, H. (2017). The complexity of child protection recurrence: The case for a systems approach. *Child Abuse & Neglect*, 63, 162-171. <https://doi.org/https://doi.org/10.1016/j.chiabu.2016.11.020>
- Jenkins, K., Harte, H. M., & Te Kahui Mana, R. (2011). *Traditional Māori parenting: an historical review of literature of traditional Māori child rearing practices in pre-European times*. Auckland, N.Z Te Kahui Mana Ririki.
- John, S. G., Brandt, T. W., Secrist, M. E., Mesman, G. R., Sigel, B. A., & Kramer, T. L. (2019). Empirically-guided assessment of complex trauma for children in foster care: A focus on appropriate diagnosis of attachment concerns. *Psychological Services*, 16(1), 120-133. <https://doi.org/10.1037/ser0000263>
- Johnston, C., & Mash, E. J. (1989). A measure of parenting satisfaction and efficacy. *Journal of Clinical Child Psychology*, 18(2), 167-175. https://doi.org/10.1207/s15374424jccp1802_8
- Jones, D. (2009). Assessment of Parenting. In J. A. Basarab-Horwath (Ed.), *The child's world: The comprehensive guide to assessing children in need* (2nd ed., pp. 282-304). London, Philadelphia: Jessica Kingsley Publishers.

- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review*, 25(3), 341-363.
<https://doi.org/10.1016/j.cpr.2004.12.004>
- Jonson-Reid, M., Drake, B., Constantino, J. N., Tandon, M., Pons, L., Kohl, P., . . . Auslander, W. (2018). A randomized trial of home visitation for CPS-involved families: the moderating impact of maternal depression and CPS history. *Child Maltreatment*, 23(3), 281-293. <https://doi.org/10.1177/1077559517751671>
- Jouriles, E. N., McDonald, R., Rosenfield, D., Norwood, W. D., Spiller, L., Stephens, N., . . . Ehrensaft, M. (2010). Improving parenting in families referred for child maltreatment: a randomized controlled trial examining effects of project support. *Journal of Family Psychology*, 24(3), 328-338. <https://doi.org/10.1037/a0019281>
- Judge Strettell. (2019, 03/09/2019). Personal communication
- Kara, E., Gibbons, V., Kidd, J., Blundell, R., Turner, K., & Johnstone, W. (2011). Developing a Kaupapa Maori framework for Whanau Ora. *AlterNative: An International Journal of Indigenous Peoples*, 7(2), 100-110.
<https://doi.org/10.1177/117718011100700203>
- Kay, C., Green, J., & Sharma, K. (2016). Disinhibited Attachment Disorder in UK Adopted Children During Middle Childhood: Prevalence, Validity and Possible Developmental Origin. *Journal of Abnormal Child Psychology*, 44(7), 1375-1386.
<https://doi.org/10.1007/s10802-016-0131-2>
- Keddell, E. (2015). The ethics of predictive risk modelling in the Aotearoa/New Zealand child welfare context: Child abuse prevention or neo-liberal tool? *Critical Social Policy*, 35(1), 69-88. <https://doi.org/10.1177/0261018314543224>

- Keddell, E. (2017). Comparing risk-averse and risk-friendly practitioners in child welfare decision-making: a mixed methods study. *Journal of Social Work Practice*, 31(4), 411-429. <https://doi.org/10.1080/02650533.2017.1394822>
- Keddell, E. (2019). Algorithmic justice in child protection: Statistical fairness, social justice and the implications for practice. *Social Sciences*, 8(10), 281. <https://doi.org/10.3390/socsci8100281>
- Keddell, E., & Davie, G. (2018). Inequalities and child protection system contact in Aotearoa New Zealand: developing a conceptual framework and research agenda. *Social Sciences*, 7(6), 89. <https://doi.org/10.3390/socsci7060089>
- Keddell, E., Davie, G., & Barson, D. (2019). Child protection inequalities in Aotearoa New Zealand: Social gradient and the ‘inverse intervention law’. *Children and Youth Services Review*, 104, 104383. <https://doi.org/10.1016/j.childyouth.2019.06.018>
- Kelly, K., Slade, A., & Grienberger, J. (2005). Maternal reflective functioning, mother-infant affective communication, and infant attachment: Exploring the link between mental states and observed caregiving behavior in the intergenerational transmission of attachment. *Attachment & Human Development*, 7(3), 299-311. <https://doi.org/10.1080/14616730500245963>
- Kemp, S. P., Marcenko, M. O., Lyons, S. J., & Kruzich, J. M. (2014, 2014/12/01/). Strength-based practice and parental engagement in child welfare services: An empirical examination. *Children and Youth Services Review*, 47, 27-35. <https://doi.org/https://doi.org/10.1016/j.childyouth.2013.11.001>
- Kenny, K., & Ensor, B. (2019, 23rd May 2019). Supernanny-like social workers could be living in at-risk homes as part of new social services. *Stuff*. Retrieved from <https://www.stuff.co.nz/national/112904389/supernannylike-social-workers-could-be-living-in-atrisk-homes-as-part-of-new-social-services>

- Kim-Cohen, J., & Turkewitz, R. (2012). Resilience and measured gene-environment interactions. *Development and Psychopathology*, 24(4), 1297-1306.
<https://doi.org/10.1017/S0954579412000715>
- Kinsley, C. H., & Meyer, E. A. (2010). The construction of the maternal brain: Theoretical comment on Kim et al. (2010). *Behavioral Neuroscience*, 124(5), 710-714.
- Kolko, D. J. (1996). Clinical monitoring of treatment course in child physical abuse: Psychometric characteristics and treatment comparisons. *Child Abuse & Neglect*, 20(1), 23-43. [https://doi.org/10.1016/0145-2134\(95\)00113-1](https://doi.org/10.1016/0145-2134(95)00113-1)
- Kravitz, R. L., Duan, N., & Braslow, J. (2004). Evidence-based medicine, heterogeneity of treatment effects and the trouble with averages. *The Milbank Quarterly*, 82(4), 661-687. <https://doi.org/10.1111/j.0887-378X.2004.00327.x>
- Krink, S., Muehlhan, C., Luyten, P., Romer, G., & Ramsauer, B. (2018). Parental Reflective Functioning affects sensitivity to distress in mothers with postpartum depression. *Journal of Child and Family Studies*, 27(5), 1671-1681.
<https://doi.org/10.1007/s10826-017-1000-5>
- Kuehnle, K., Coulter, M., & Firestone, G. (2000). Child protection evaluations: the forensic stepchild. *Family Court Review*, 38(3), 368-391. <https://doi.org/10.1111/j.174-1617.2000.tb00580.x>
- Lang, A. J., Rodgers, C. S., & Lebeck, M. M. (2006). Associations between maternal childhood maltreatment and psychopathology and aggression during pregnancy and postpartum. *Child Abuse & Neglect*, 30(1), 17-25.
<https://doi.org/10.1016/j.chiabu.2005.07.006>
- Larrieu, J. A., Heller, S. S., Smyke, A. T., & Zeanah, C. H. (2008). Predictors of permanent loss of custody for mothers of infants and toddlers in foster care. *Infant Mental Health Journal*, 29(1), 48-60.

- Lauritzen, C., Vis, S. A., & Fossum, S. (2018). Factors that determine decision making in child protection investigations: A review of the literature. *Child & Family Social Work, 23*(4), 743-756. <https://doi.org/10.1111/cfs.12446>
- Lauterbach, D., & Armour, C. (2016). Symptom trajectories among child survivors of maltreatment: Findings from the Longitudinal Studies of Child Abuse and Neglect (LONGSCAN). *Journal of Abnormal Child Psychology, 44*(2), 369-379. <https://doi.org/10.1007/s10802-015-9998-6>
- Lavi, I., Manor-Binyamini, I., Seibert, E., Katz, L. F., Ozer, E. J., & Gross, J. J. (2019). Broken bonds: A meta-analysis of emotion reactivity and regulation in emotionally maltreating parents. *Child Abuse & Neglect, 88*, 376-388. <https://doi.org/10.1016/j.chiabu.2018.11.016>
- Léveillé, S., & Chamberland, C. (2010). Toward a general model for child welfare and protection services: A meta-evaluation of international experiences regarding the adoption of the Framework for the Assessment of Children in Need and Their Families (FACNF). *Children and Youth Services Review, 32*(7), 929-944. <https://doi.org/10.1016/j.chilyouth.2010.03.009>
- Lieberman, A. F., Van Horn, P., & Ghosh Ippen, G. (2005). Toward evidence-based treatment: Child-Parent Psychotherapy with preschoolers exposed to marital violence. *Journal of the American Academy of Child and Adolescent Psychiatry, 44*(12), 1241-1248.
- Littell, J. H., & Girvin, H. (2005). Caregivers' readiness for change: predictive validity in a child welfare sample. *Child Abuse & Neglect, 29*(1), 59-80. <https://doi.org/10.1016/j.chiabu.2004.08.004>
- Lloyd, M. H., Akin, B. A., & Brook, J. (2017). Parental drug use and permanency for young children in foster care: A competing risks analysis of reunification, guardianship, and

- adoption. *Children and Youth Services Review*, 77, 177-187.
<https://doi.org/10.1016/j.chidyouth.2017.04.016>
- Lloyd, M. H., & Brook, J. (2019). Drug testing in child welfare: A systematic review. *Children and Youth Services Review*, 104, 104389.
<https://doi.org/10.1016/j.chidyouth.2019.104389>
- Lo, C. K.-M., Ho, F. K.-W., Yan, E., Lu, Y., Chan, K. L., & Ip, P. (2019). Associations between child maltreatment and adolescents' health-related quality of life and emotional and social problems in low-income families, and the moderating role of social support. *Journal of Interpersonal Violence*, 886260519835880-886260519835880. <https://doi.org/10.1177/0886260519835880>
- Loop, L., Mouton, B., Brassart, E., & Roskam, I. (2017). The observation of child behavior during parent-child interaction: The psychometric properties of the Crowell Procedure. *Journal of Child and Family Studies*, 26(4), 1040-1050.
<https://doi.org/10.1007/s10826-016-0625-0>
- Lopez-Pelayo, H., Batalla, A., Balcells, M. M., Colom, J., & Gual, A. (2015). Assessment of cannabis use disorders: A systematic review of screening and diagnostic instruments. *Psychological Medicine*, 45(6), 1121-1133.
<https://doi.org/10.1017/S0033291714002463>
- López, M., Fluke, J. D., Benbenishty, R., & Knorth, E. J. (2015). Commentary on decision-making and judgments in child maltreatment prevention and response: An overview. *Child Abuse & Neglect*, 49(Special issue), 1-11.
<https://doi.org/10.1016/j.chiabu.2015.08.013>
- Lovibond, S. H., & Lovibond, P. F. (1995). The structure of negative emotional states: Comparison of the Depression Anxiety Stress Scales (DASS) with the Beck

- Depression and Anxiety Inventories. *Behaviour Research and Therapy*, 33(3), 335-343. [https://doi.org/10.1016/0005-7967\(94\)00075-U](https://doi.org/10.1016/0005-7967(94)00075-U)
- Lowell, A., & Renk, K. (2017). Predictors of child maltreatment potential in a national sample of mothers of young children. *Journal of Aggression, Maltreatment & Trauma*, 26(4), 335-353. <https://doi.org/10.1080/10926771.2017.1299825>
- Luyten, P., Nijssens, L., Fonagy, P., & Mayes, L. C. (2017). Parental Reflective Functioning: theory, research, and clinical applications. *Psychoanalytic Study of the Child*, 70(1), 174-199. <https://doi.org/10.1080/00797308.2016.1277901>
- Macdonald, G., Lewis, J., Ghate, D., Gardner, E., Adams, C., & Kelly, G. (2017). *Evaluation of the Safeguarding Children Assessment and Analysis Framework (SAAF)*. Department for Education and Skills, UK.
- MacMillan, H., Thomas, B., Jamieson, E., Walsh, C., Boyle, M., Shannon, H., & Gafni, A. (2005). Effectiveness of home visitation by public-health nurses in prevention of the recurrence of child physical abuse and neglect: a randomised controlled trial. *The Lancet*, 365, 1786-1793. [https://doi.org/10.1016/S0140-6736\(05\)66388-X](https://doi.org/10.1016/S0140-6736(05)66388-X)
- MacMillan, H., Wathen, C., Barlow, J., Fergusson, D., Leventhal, J., & Taussig, H. (2009). Interventions to prevent child maltreatment and associated impairment. *The Lancet*, 373, 250-266. [https://doi.org/10.1016/S0140-6736\(08\)61708-0](https://doi.org/10.1016/S0140-6736(08)61708-0)
- Madigan, S., Cyr, C., Eirich, R., Fearon, R. M. P., Ly, A., Rash, C., . . . Alink, L. R. A. (2019). Testing the cycle of maltreatment hypothesis: Meta-analytic evidence of the intergenerational transmission of child maltreatment. *Development and Psychopathology*, 31(1), 23-51. <https://doi.org/10.1017/S0954579418001700>
- Maher, E. J., Marcynyszyn, L. A., Corwin, T. W., & Hodnett, R. (2011). Dosage matters: The relationship between participation in the Nurturing Parenting Program for infants,

- toddlers, and preschoolers and subsequent child maltreatment. *Children and Youth Services Review*, 33(8), 1426-1434. <https://doi.org/10.1016/j.childyouth.2011.04.014>
- Main, M. (2000). Metacognitive knowledge, metacognitive monitoring, and singular (coherent) vs. multiple (incoherent) model of attachment: Findings and directions for future research. In M. Colin, J. Stevenson-Hinde, & P. Marris (Eds.), *Attachment Across the Life Cycle* (pp. 135-167): Routledge.
- Maisto, S. A., Carey, M. P., Carey, K. B., Gordon, C. M., & Gleason, J. R. (2000). Use of the AUDIT and the DAST-10 to identify alcohol and drug use disorders among adults with a severe and persistent mental illness. *Psychological Assessment*, 12(2), 186-192. <https://doi.org/10.1037/1040-3590.12.2.186>
- Martinez-Torteya, C., Katsonga-Phiri, T., Rosenblum, K. L., Hamilton, L., & Muzik, M. (2018). Postpartum depression and resilience predict parenting sense of competence in women with childhood maltreatment history. *Archives of Women's Mental Health*, 21(6), 777-784. <https://doi.org/10.1007/s00737-018-0865-7>
- Matos, A. L., Moleiro, C., & Dias, J. G. (2014). Clusters of abusive parenting: A latent class analysis of families referred to Child Protective Services in Portugal. *Child Abuse & Neglect*, 38(12), 2053-2061. <https://doi.org/10.1016/j.chiabu.2014.10.018>
- McConnell, D., Feldman, M., Aunos, M. & Prasad, N. (2011). Parental cognitive impairment and child maltreatment in Canada. *Child Abuse and Neglect*, 35, 621-632.
- McHugh, M. L. (2012). Interrater reliability: The kappa statistic. *Biochemia Medica*, 22(3), 276-282.
- Michl-Petzing, L. C., Handley, E. D., Sturge-Apple, M., Cicchetti, D., & Toth, S. L. (2019). Re-examining the "Cycle of Abuse": Parenting determinants among previously maltreated, low-income mothers. *Journal of Family Psychology*, 33(6), 742-752. <https://doi.org/10.1037/fam0000534>

- Milner, J. S. (1986). *The child abuse potential inventory: Manual*. United States: PAR.
- Milot, T., St-Laurent, D., Éthier, L. S., & Provost, M. A. (2010). Trauma-related symptoms in neglected preschoolers and affective quality of mother-child communication. *Child Maltreatment*, 15(4), 293-304. <https://doi.org/10.1177/1077559510379153>
- Ministry of Social Development. (2012). *White paper for vulnerable children (Vols I-II)*. Wellington, New Zealand:
- Ministry of Social Development. (2016). *Expert panel final report: Investing in New Zealand's children and their families*. Wellington: on behalf of The Modernising Child, Youth and Family Panel by Ministry of Social Development.
- Moran, J. A., & Weinstock, D. K. (2011). Assessing Parenting Skills for Family Court. *Journal of Child Custody*, 8(3), 166-188. <https://doi.org/10.1080/15379418.2011.594726>
- Morris, K., & Connelly, M. (2012). Family decision making in child welfare: Challenges in developing a knowledge base for practice. *Child Abuse Review*, 21, 41-52.
- Morrison, T. (2010). Assessing parental motivation for change. In J. A. Basarab-Horwath (Ed.), *The child's world: the comprehensive guide to assessing children in need* (2nd ed.). London; Philadelphia;: Jessica Kingsley Publishers.
- Moss, E., Dubois-Comtois, K., Cyr, C., Tarabulsky, G. M., St-Laurent, D., & Bernier, A. (2011). Efficacy of a home-visiting intervention aimed at improving maternal sensitivity, child attachment, and behavioral outcomes for maltreated children: A randomized control trial. *Development and Psychopathology*, 23, 195-210.
- Mossman, E., Paulin, J., & Wehipeihana, N. (2017). *Evaluation of the family violence Integrated Safety Response pilot : final report*. Wellington, NZ: Online.

- Muriwai, E., Houkamau, C. A., & Sibley, C. G. (2015). Culture as cure? The protective function of Maori Cultural Efficacy on psychological distress. *New Zealand Journal of Psychology*, 44(2), 14.
- New Zealand Drug Foundation. (2013). Drug use in NZ. Retrieved 18th October 2019, from <https://www.drugfoundation.org.nz/policy-and-advocacy/drugs-in-nz/>
- New Zealand Government. (1989). *Oranga Tamariki Act*.
- Newman, L. K., Stevenson, C. S., Bergman, L. R., & Boyce, P. (2007). Borderline personality disorder, mother-infant interaction and parenting perceptions: preliminary findings. *Australasian Psychiatry*, 41(7), 598-605.
<https://doi.org/10.1080/00048670701392833>
- Nunes, C., Jiménez, L., Menéndez, S., Ayala-Nunes, L., & Hidalgo, V. (2016). Psychometric properties of an adapted version of the parental sense of competence (PSOC) scale for Portuguese at-risk parents. *Child & Family Social Work*, 21(4), 433-441.
<https://doi.org/10.1111/cfs.12159>
- O'Neill, A. T., Bussey, K., Lennings, C. J., & Seidler, K. M. (2018). The Views of Psychologists, Lawyers, and Judges on key components and the quality of child custody evaluations in Australia: Quality of CCES. *Family Court Review*, 56(1), 64-78. <https://doi.org/10.1111/fcre.12323>
- Oak, E. (2016). A minority report for social work? The Predictive Risk Model (PRM) and the Tuituia Assessment Framework in addressing the needs of New Zealand's vulnerable children. *The British Journal of Social Work*, 46(5), 1208-1223.
<https://doi.org/10.1093/bjsw/bcv028>
- Oei, T. P. S., Sawang, S., Goh, Y. W., & Mukhtar, F. (2013). Using the Depression Anxiety Stress Scale 21 (DASS-21) across cultures. *International Journal of Psychology*, 48(6), 1018-1029. <https://doi.org/10.1080/00207594.2012.755535>

- Ohan, J. L., Leung, D. W., & Johnston, C. (2000). The Parenting Sense of Competence Scale: Evidence of a stable factor structure and validity. *Canadian Journal of Behavioural Science/Revue Canadienne des Sciences du Comportement*, 32(4), 251-261.
<https://doi.org/10.1037/h0087122>
- Oranga Tamariki Facebook page. (2019). Retrieved 11.9.2019, from
https://www.facebook.com/OrangaTamariki/?ref=br_rs
- Oranga Tamariki Ministry for Children. (2017). Oranga Tamariki bill passes into law. Retrieved 31/08/2019, from <https://www.orangatamariki.govt.nz/news/the-children-young-persons-and-their-families-oranga-tamariki-legislation-bill/>
- Oranga Tamariki Ministry for Children. (2019). The Tuituia framework and domains. Retrieved 5th June 2019, from <https://practice.orangatamariki.govt.nz/our-work/practice-tools/the-tuituia-framework-and-tools/the-tuituia-framework-and-domains/#block-resources>
- Orsi, R., Brown, S. M., Knight, K. E., & Shillington, A. M. (2018). Remaining home: Well-being outcomes and co-occurring parental substance use following a maltreatment investigation in middle childhood. *Children and Youth Services Review*, 84, 118-124.
<https://doi.org/10.1016/j.childyouth.2017.11.022>
- Oxford, M. L., Spieker, S. J., Lohr, M. J., & Fleming, C. B. (2016). Promoting First Relationships: randomized trial of a 10-week home visiting program with families referred to child protective services. *Child Maltreatment*, 21(4), 267-277.
<https://doi.org/10.1177/1077559516668274>
- Pajulo, M., Pyykkönen, N., Kalland, M., Sinkkonen, J., Helenius, H., Punamäki, R. L., & Suchman, N. (2012). Substance-abusing mothers in residential treatment with their babies: Importance of pre- and postnatal maternal reflective functioning. *Infant Mental Health Journal*, 33(1), 70-81. <https://doi.org/10.1002/imhj.20342>

- Pasalich, D. S., Fleming, C. B., Spieker, S. J., Lohr, M. J., & Oxford, M. L. (2019). Does parents' own history of child abuse moderate the effectiveness of the Promoting First Relationships® intervention in child welfare? *Child Maltreatment*, 24(1), 56-65.
<https://doi.org/10.1177/1077559518809217>
- Pears, K. C., Kim, H. K., & Fisher, P. A. (2008). Psychosocial and cognitive functioning of children with specific profiles of maltreatment. *Child Abuse & Neglect*, 32(10), 958-971. [https://doi.org/https://doi.org/10.1016/j.chiabu.2007.12.009](https://doi.org/10.1016/j.chiabu.2007.12.009)
- Pere, L., & Barnes, A. (2009). New learnings from old understandings: Conducting qualitative research with Māori. *Qualitative Social Work*, 8(4), 449-467.
<https://doi.org/10.1177/1473325009345796>
- Pereplechikova, F., Ansell, E., & Axelrod, S. (2012). Borderline Personality Disorder features and history of childhood maltreatment in mothers involved with child protective services. *Child Maltreatment*, 17(2), 182-190.
<https://doi.org/10.1177/1077559512448471>
- Perry, N., Newman, L. K., Hunter, M., & Dunlop, A. (2015). Improving antenatal risk assessment in women exposed to high risks. *Clinical Child Psychology and Psychiatry*, 20(1), 84-105. <https://doi.org/10.1177/1359104513499355>
- Choate, P. & McKenzie, A. (2015). Psychometrics in Parenting Capacity Assessments – a problem for First Nations parents. *First Peoples Child & Family Review*, 10(2).
- Pitama, S., Robertson, P., Cram, F., Gillies, M., Huria, T., & Dallas-Katoa, W. (2007). Meihana model: A clinical assessment framework. *New Zealand Journal of Psychology*, 36(3), 118-125.
- Pizzey, S., Bentovim, A., Bingley-Miller, L., & Cox, A. (2017). Evidence-based assessments of children and families: Safeguarding Children Assessment and Analysis Framework. In L. Dixon, D. F. Perkins, C. Hamilton-Giachritsis, & L. A. Craig

- (Eds.), *The Wiley Handbook of what works in child maltreatment : an evidence-based approach to assessment and intervention in child protection*. Hoboken, United Kingdom: John Wiley & Sons, Incorporated.
- Platt, D., & Riches, K. (2016a). Assessing parental capacity to change: The missing jigsaw piece in the assessment of a child's welfare? *Children and Youth Services Review*, 61, 141-148.
- Platt, D., & Riches, K. (2016b). *C-Change Capacity to Change assessment manual*. Bristol: University of Bristol.
- Polinsky, M. L., Pion-Berlin, L., Williams, S., Long, T., & Wolf, A. M. (2010, Nov/Dec). Preventing Child Abuse and Neglect: A National Evaluation of Parents Anonymous Groups. *Child Welfare*, 89(6), 43-62.
- Pritchett, R., Pritchett, J., Marshall, E., Davidson, C., & Minnis, H. (2013). Reactive attachment disorder in the general population: A hidden ESSENCE disorder. *The Scientific World Journal*, 2013, 818157-818156. <https://doi.org/10.1155/2013/818157>
- Prochaska, J. O., Velicer, W. F., Rossi, J. S., Goldstein, M. G., Marcus, B. H., Rakowski, W., . . . Rossi, S. R. (1994). Stages of change and decisional balance for 12 problem behaviors. *Health Psychology*, 13(1), 39-46. <https://doi.org/10.1037/0278-6133.13.1.39>
- R Core Team. (2018). R: A language and environment for statistical computing. Vienna, Austria Retrieved from <https://www.R-project.org/>
- Radio New Zealand. (2019, 1/9/2019). *NZ's own stolen generation*. Retrieved from <https://www.rnz.co.nz/programmes/the-detail/story/2018699080/nz-s-own-stolen-generation>

- Rebstock, P., Bush, M., Douglas, P., Dunlop, D., Leahy, H., & Poulton, R. (2015). *Modernising Child, Youth and Family Expert Panel: Interim Report*. Wellington: Ministry of Social Development.
- Reijman, S., Alink, L. R. A., Compier-De Block, L. H. C. G., Werner, C. D., Maras, A., Rijnberk, C., . . . Bakermans-Kranenburg, M. J. (2016). Attachment representations and autonomic regulation in maltreating and nonmaltreating mothers. *Development and Psychopathology*, 29(3), 1-13. <https://doi.org/10.1017/S0954579416001036>
- Reinert, D. F., & Allen, J. P. (2002). The Alcohol Use Disorders Identification Test (AUDIT): A review of recent research. *Alcoholism: Clinical and Experimental Research*, 26(2), 272-279. <https://doi.org/10.1111/j.1530-0277.2002.tb02534.x>
- Rios, L. E., Herval, Á. M., Ferreira, R. C., & Freire, M. d. C. M. (2019). Prevalences of Stages of Change for smoking cessation in adolescents and associated factors: Systematic review and meta-analysis. *Journal of Adolescent Health*, 64(2), 149-157. <https://doi.org/10.1016/j.jadohealth.2018.09.005>
- Rosenblum, K. L., McDonough, S. C., Sameroff, A. J., & Muzik, M. (2008). Reflection in thought and action: Maternal parenting reflectivity predicts mind-minded comments and interactive behavior. *Infant Mental Health Journal*, 29(4), 362-376. <https://doi.org/10.1002/imhj.20184>
- Rosso, A. M., & Airaldi, C. (2016). Intergenerational transmission of reflective functioning. *Frontiers in Psychology*, 7, 1903-1903. <https://doi.org/10.3389/fpsyg.2016.01903>
- Rouland, B., Vaithianathan, R., Wilson, D., & Putnam-Hornstein, E. (2019). Ethnic disparities in childhood prevalence of maltreatment: evidence from a New Zealand birth cohort. *American Journal of Public Health*, 109(9), 1255-1257. <https://doi.org/10.2105/AJPH.2019.305163>

- Runyan, D. K., Dunne, M. P., Zolotor, A. J., Madrid, B., Jain, D., Gerbaka, B., . . . Youssef, R. M. (2009). The development and piloting of the ISPCAN Child Abuse Screening Tool—Parent version (ICAST-P). *Child Abuse & Neglect*, 33(11), 826-832.
<https://doi.org/10.1016/j.chiabu.2009.09.006>
- Rutherford, H. J. V., Wallace, N. S., Laurent, H. K., & Mayes, L. C. (2015, 6/). Emotion regulation in parenthood. *Developmental Review*, 36, 1-14.
<https://doi.org/http://dx.doi.org/10.1016/j.dr.2014.12.008>
- Rutter, M. (1995). Clinical implications of attachment concepts. *Journal of Child Psychology and Psychiatry*, 36(4), 549-571. <https://doi.org/10.1111/j.1469-7610.1995.tb02314.x>
- Sadler, L., Slade, A., Close, N., Webb, D., Simpson, T., Fennie, K., & Mayes, L. (2013). Minding the baby: Enhancing reflectiveness to improve early health and relationship outcomes in an interdisciplinary home-visiting program. *Infant Mental Health Journal*, 34(5), 391-405. <https://doi.org/10.1002/imhj.21406>
- Sanders, R., Colton, M., & Roberts, S. (1999, 1999/03/01/). Child abuse fatalities and cases of extreme concern: lessons from reviews. *Child Abuse & Neglect*, 23(3), 257-268.
[https://doi.org/https://doi.org/10.1016/S0145-2134\(98\)00123-9](https://doi.org/https://doi.org/10.1016/S0145-2134(98)00123-9)
- Schechter, D., Coots, T., Zeanah, C., Davies, M., Coates, S., Trabka, K., . . . Myers, M. (2005). Maternal mental representations of the child in an inner-city clinical sample: Violence-related posttraumatic stress and reflective functioning. *Attachment & Human Development*, 7(3), 313-331. <https://doi.org/10.1080/14616730500246011>
- Schechter, D., Coots, T., Zeanah, C., Davies, M., Coates, S., Trabka, K., . . . Myers, M. (2008). Distorted maternal mental representations and atypical behavior in a clinical sample of violence-exposed mothers and their toddlers. *Journal of Trauma & Dissociation*, 9(2), 123-147. <https://doi.org/10.1080/15299730802045666>

- Schmidt, F., Cuttress, L. J., Lang, J., Lewandowski, M. J., & Rawana, J. S. (2007). Assessing the parent-child relationship in parenting capacity evaluations: clinical applications of attachment research. *Family Court Review*, 45(2), 247-259.
<https://doi.org/10.1111/j.1744-1617.2007.00141.x>
- Schwarz, N. (1990). Assessing frequency reports of mundane behaviors: contributions of cognitive psychology to questionnaire construction. In C. Hendrick & M. S. Clark (Eds.), *Research methods in personality and social psychology* (Vol. 11). Newbury Park, Calif: Sage Publications.
- Shadwell, T. (2016). *Faces of Innocents: Do we need a special law for child killings?*
Retrieved from <https://www.stuff.co.nz/national/faces-of-innocents/82540163/faces-of-innocents-do-we-need-a-special-law-for-child-killings>
- Shlonsky, A., & Wagner, D. (2005). The next step: Integrating actuarial risk assessment and clinical judgment into an evidence-based practice framework in CPS case management. *Children and Youth Services Review*, 27(4), 409-427.
<https://doi.org/10.1016/j.childyouth.2004.11.007>
- Sierau, S., White, L. O., Klein, A. M., Manly, J. T., von Klitzing, K., & Herzberg, P. Y. (2018). Assessing psychological and physical abuse from children's perspective: Factor structure and psychometric properties of the picture-based, modularized child-report version of the Parent-Child Conflict Tactics Scale - Revised (CTSPC-R). *PLoS ONE*, 13(10), e0205401. <https://doi.org/10.1371/journal.pone.0205401>
- Silk, J. S., Shaw, D. S., Skuban, E. M., Oland, A. A., & Kovacs, M. (2006, Jan). Emotion regulation strategies in offspring of childhood-onset depressed mothers. *Journal of Child Psychology and Psychiatry*, 47(1), 69-78. <https://doi.org/10.1111/j.1469-7610.2005.01440.x>

- Simmel, C., Merritt, D., Kim, H. M.-S., & Kim, S. (2016). An exploratory study of neglect and emotional abuse in adolescents: classifications of caregiver risk factors. *Journal of Child and Family Studies*, 25(8), 2372-2386. <https://doi.org/10.1007/s10826-016-0414-9>
- Simmonds, J. (2010). The making and breaking of relationships: organizational and clinical questions in providing services for looked after children? *Clinical Child Psychology and Psychiatry*, 15(4), 601-612. <https://doi.org/10.1177/1359104510375930>
- Simon, J. D., & Brooks, D. (2017). Identifying families with complex needs after an initial child abuse investigation: A comparison of demographics and needs related to domestic violence, mental health, and substance use. *Child Abuse & Neglect*, 67, 294-304. <https://doi.org/https://doi.org/10.1016/j.chiabu.2017.03.001>
- Skinner, H. A. (1982). The Drug Abuse Screening Test. *Addictive Behavior*, 7, 363-371.
- Skinner, H. A. (2008). Guide for the Drug Abuse Screening Test (DAST).
- Skowron, E. A., Cipriano-Essel, E., Benjamin, L. S., Pincus, A. L., & Van Ryzin, M. J. (2013). Cardiac vagal tone and quality of parenting show concurrent and time-ordered associations that diverge in abusive, neglectful, and non-maltreating mothers. *Couple and Family Psychology: Research and Practice*, 2(2), 95-115. <https://doi.org/10.1037/cfp0000005>
- Skowron, E. A., Kozlowski, J. M., & Pincus, A. L. (2010). Differentiation, self–other representations, and rupture–repair processes: Predicting Child maltreatment risk. *Journal of Counseling Psychology*, 57(3), 304-316.
- Slade, A., Bernbach, E., Grienberger, J., Levy, D., & Locker, A. (2005). *Addendum to Reflective Functioning Scoring Manual*. New York: The Psychological Center.

- Slade, A., Grienberger, J., Bernbach, E., Levy, D., & Locker, A. (2005). Parental reflective functioning: An introduction. *Attachment & Human Development*, 7(3), 269-281.
<https://doi.org/10.1080/14616730500245906>
- Smyke, A. T., Dumitrescu, A., & Zeanah, C. H. (2002). Attachment disturbances in young children I: The continuum of caretaking casualty. *Journal of the American Academy of Child & Adolescent Psychiatry*, 41(8), 972-982.
<https://doi.org/https://doi.org/10.1097/00004583-200208000-00016>
- Spieker, S. J., & Crittenden, P. M. (2018). Can attachment inform decision-making in child protection and forensic settings? *Infant Mental Health Journal*, 39(6), 625-641.
<https://doi.org/10.1002/imhj.21746>
- Sprang, G., Clark, J. J., & Bass, S. (2005). Factors that contribute to child maltreatment severity: A multi-method and multidimensional investigation. *Child Abuse & Neglect*, 29(4), 335-350. <https://doi.org/10.1016/j.chiabu.2004.08.008>
- Stacks, A. M., Muzik, M., Wong, K., Beeghly, M., Huth-Bocks, A., Irwin, J. L., & Rosenblum, K. L. (2014). Maternal reflective functioning among mothers with childhood maltreatment histories: Links to sensitive parenting and infant attachment security. *Attachment & Human Development*, 16(5), 515-533.
<https://doi.org/10.1080/14616734.2014.935452>
- Statistics New Zealand. (2013). 2013 Census quickstats about greater Christchurch. Retrieved 18th October 2019, from <http://archive.stats.govt.nz/Census/2013-census/profile-and-summary-reports/quickstats-about-greater-chch/cultural-diversity.aspx>
- Staudt, M. (2007). Treatment engagement with caregivers of at-risk children: Gaps in research and conceptualization. *Journal of Child and Family Studies*, 16(2), 183-196.
<https://doi.org/10.1007/s10826-006-9077-2>

- Steinhauer, P. D. (1983). Assessing for parenting capacity. *American Journal of Orthopsychiatry*, 53(3), 468-481. <https://doi.org/10.1111/j.1939-0025.1983.tb03391.x>
- Steinhauer, P. D. (1991). *The least detrimental alternative: A systemic guide to case planning and decision making for children in care*. Toronto, Canada: University of Toronto Press.
- Stoltenborgh, M., Bakermans-Kranenburg, M. J., Alink, L. R. A., & van Ijzendoorn, M. H. (2015). The prevalence of child maltreatment across the globe: Review of a series of meta-analyses. *Child Abuse Review*, 24(1), 37-50. <https://doi.org/10.1002/car.2353>
- Stover, C. S., & Kiselica, A. (2014). An initial examination of the association of reflective functioning to parenting of fathers. *Infant Mental Health Journal*, 35(5), 452-461. <https://doi.org/10.1002/imhj.21459>
- Straus, M. A., Hamby, S. L., Finkelhor, D., Moore, D. W., & Runyan, D. (1998). Identification of child maltreatment with the Parent-Child Conflict Tactics Scales: Development and psychometric data for a national sample of American parents. *Child Abuse & Neglect*, 22(4), 249-270. [https://doi.org/https://doi.org/10.1016/S0145-2134\(97\)00174-9](https://doi.org/10.1016/S0145-2134(97)00174-9)
- Suardi, F., Moser, D. A., Sancho Rossignol, A., Manini, A., Vital, M., Merminod, G., . . . Schechter, D. S. (2018). Maternal reflective functioning, interpersonal violence-related posttraumatic stress disorder, and risk for psychopathology in early childhood. *Attachment and Human Development*, 1-21. <https://doi.org/10.1080/14616734.2018.1555602>
- Swenson, C. C., Schaeffer, C. M., Henggeler, S. W., Faldowski, R., & Mayhew, A. M. (2010). Multisystemic therapy for child abuse and neglect: A randomized effectiveness trial. *Journal of Family Psychology*, 24(4), 497-507. <https://doi.org/10.1037/a0020324>

- Taris, T. (2000). *A primer in longitudinal data analysis*. London: SAGE.
- Tarren-Sweeney, M. (2008). Retrospective and concurrent predictors of the mental health of children in care. *Children and Youth Services Review*, 30(1), 1-25.
<https://doi.org/10.1016/j.childyouth.2007.05.014>
- Tarren-Sweeney, M. (2013a). Our 21st century quest – Locating effective mental health interventions for children and young people in care, and those adopted from care. In M. Tarren-Sweeney & A. Vetere (Eds.), *Mental health services for vulnerable children and young people: Supporting children who are, or have been, in foster care*. London: Routledge.
- Tarren-Sweeney, M. (2013b). Setting the bar higher: What information do we need to establish the effectiveness of mental health interventions for children with complex attachment- and trauma-related difficulties? *Clinical Child Psychology and Psychiatry*, 18(1), 3-6. <https://doi.org/10.1177/1359104512467406>
- Tarren-Sweeney, M. (2016). The developmental case for adopting children from care. *Clinical Child Psychology and Psychiatry*, 21(4), 497-505.
<https://doi.org/10.1177/1359104516670277>
- Te Puni Kōkiri. (2010). *Arotake tākino whānau: Literature review on family violence*. Wellington, N.Z.: Te Puni Kōkiri.
- Teicher, M. H., & Samson, J. A. (2016). Annual research review: enduring neurobiological effects of childhood abuse and neglect. *Journal of Child Psychology and Psychiatry*, 57(3), 241-266. <https://doi.org/10.1111/jcpp.12507>
- Thomas, R., & Zimmer-Gembeck, M. J. (2011). Accumulating evidence for Parent-Child Interaction Therapy in the prevention of child maltreatment. *Child Development*, 82(1), 177-192.

- Thornberry, T. P., & Henry, K. L. (2013). Intergenerational continuity in maltreatment. *Journal of Abnormal Child Psychology*, 41(4), 555-569.
<https://doi.org/10.1007/s10802-012-9697-5>
- Thornberry, T. P., Knight, K. E., & Lovegrove, P. J. (2012, Jul). Does maltreatment beget maltreatment? A systematic review of the intergenerational literature. *Trauma Violence Abuse*, 13(3), 135-152. <https://doi.org/10.1177/1524838012447697>
- Ullman, S. E., Relyea, M., Peter-Hagene, L., & Vasquez, A. L. (2013). Trauma histories, substance use coping, PTSD, and problem substance use among sexual assault victims. *Addictive Behaviors*, 38(6), 2219-2223.
<https://doi.org/https://doi.org/10.1016/j.addbeh.2013.01.027>
- UNICEF. (1990). *First Call for Children*. Paper presented at the World Summit for Children, New York.
- United Nations Convention on the Rights of the Child.
- United Nations Treaty Collection. (2019). Human Rights: Convention on the Rights of the Child. Retrieved 1/9/2019, from
https://treaties.un.org/pages/ViewDetails.aspx?src=IND&mtdsg_no=IV-11&chapter=4&lang=en
- van der Put, C. E., Assink, M., & Stams, G. J. J. M. (2016). Predicting relapse of problematic child-rearing situations. *Children and Youth Services Review*, 61, 288-295.
<https://doi.org/https://doi.org/10.1016/j.childyouth.2016.01.002>
- Van Ijzendoorn, M. H., Steele, M., & Granqvist, P. (2018). On exactitude in science: A map of the empire the size of the empire. *Infant Mental Health Journal*, 39(6), 652-655.
<https://doi.org/10.1002/imhj.21751>
- Venta, A., Velez, L., & Lau, J. (2016). The role of parental depressive symptoms in predicting dysfunctional discipline among parents at high-risk for child maltreatment.

Journal of Child and Family Studies, 25(10), 3076-3082.

<https://doi.org/10.1007/s10826-016-0473-y>

Villalobos-Gallegos, L., Pérez-López, A., Mendoza-Hassey, R., Graue-Moreno, J., & Marín-Navarrete, R. (2015). Psychometric and diagnostic properties of the Drug Abuse Screening Test (DAST): Comparing the DAST-20 vs. the DAST-10. *Salud Mental*, 38(2), 89-94.

Vischer, A. W. K., Grietens, H., Knorth, E. J., & Mulder, H. (2017). Assessing parenting in the context of reunification of infants/toddlers and their families: How to face the challenges? *Infant Mental Health Journal*, 38(3), 406-421.

<https://doi.org/10.1002/imhj.21646>

Vlahovicova, K., Melendez-Torres, G. J., Leijten, P., Knerr, W., & Gardner, F. (2017). Parenting programs for the prevention of child physical abuse recurrence: A systematic review and meta-analysis. *Clinical Child and Family Psychology Review*, 20(3), 351-365. <https://doi.org/10.1007/s10567-017-0232-7>

Vreeswijk, C. M. J. M., Maas, A. J. B. M., & van Bakel, H. J. A. (2012). Parental representations: A systematic review of the working model of the child interview. *Infant Mental Health Journal*, 33(3), 314-328. <https://doi.org/10.1002/imhj.20337>

Wagner, D., Johnson, K., & Caskey, R. (2001). *Evaluation of Michigan's foster care Structured Decision Making case management system*. Wisconsin, USA: Children's Research Center.

Waitangi Tribunal. (2019). *Hauora: report on stage one of the health services and outcomes kaupapa inquiry*. Lower Hutt, New Zealand: Legislation Direct. Retrieved from https://forms.justice.govt.nz/search/Documents/WT/WT_DOC_152801817/Hauora%20W.pdf

- Walters, A., & Seymour, F. (2017). Stories of survival and resilience: An enquiry into what helps tamariki and rangatahi through whānau violence. *New Zealand Journal of Psychology*, 46(3), 80-87.
- Walters, L. (2019, 25th September 2019). No change to child welfare without everyone on board. *Newsroom*. Retrieved from <https://www.newsroom.co.nz/2019/09/25/826708/it-will-take-everyone-to-change-the-child-welfare-system#>
- Ward, H., Brown, R., & Hyde-Dryden, G. (2014). *Assessing parental capacity to change when children are on the edge of care: An overview of current research evidence*. London: Centre for Child and Family Research, Loughborough University.
- Whitcombe-Dobbs, S., & Tarren-Sweeney, M. (2019, 2019/12/01). What evidence is there that parenting interventions reduce child abuse and neglect among maltreating families? A systematic review. *Developmental Child Welfare*, 1(4), 374-393. <https://doi.org/10.1177/2516103219893383>
- Widom, C. S., Czaja, S. J., Kozakowski, S. S., & Chauhan, P. (2017). Does adult attachment style mediate the relationship between childhood maltreatment and mental and physical health outcomes? *Child Abuse & Neglect*, 76, 533-545. <https://doi.org/10.1016/j.chiabu.2017.05.002>
- Wilson, S., Rack, J., Shi, X., & Norris, A. (2008). Comparing physically abusive, neglectful, and non-maltreating parents during interactions with their children: A meta-analysis of observational studies. *Child Abuse & Neglect*, 32(9), 897-911. <https://doi.org/10.1016/j.chiabu.2008.01.003>
- Wittkowski, A., Garrett, C., Calam, R., & Weisberg, D. (2017). Self-report measures of parental self-efficacy: A systematic review of the current literature. *Journal of Child and Family Studies*, 26(11), 2960-2978. <https://doi.org/10.1007/s10826-017-0830-5>

- World Health Organization. (1999). *Consultation on Child Abuse Prevention*. Geneva, Switzerland: Violence and Injury Prevention Team and Global Forum for Health Research. Retrieved from <https://apps.who.int/iris/handle/10665/65900>
- World Health Organization. (2016). Child maltreatment. Retrieved from <https://www.who.int/en/news-room/fact-sheets/detail/child-maltreatment>
- World Health Organization. (2018). *International classification of diseases for mortality and morbidity statistics* (11th ed.). Retrieved from <https://icd.who.int/browse11/l-m/en>
- Wulczyn, F. (2009). Epidemiological perspectives on maltreatment prevention. *The Future of Children*, 19(2), 39-66. <https://doi.org/10.1353/foc.0.0029>
- Yatchmenoff, D. K. (2005). Measuring client engagement from the client's perspective in nonvoluntary child protective services. *Research on Social Work Practice*, 15(2), 84-96. <https://doi.org/10.1177/1049731504271605>
- Yates, A., Hull, J. W., & Huebner, R. B. (1983). Predicting the abusive parent's response to intervention. *Child Abuse and Neglect*, 7, 37-44.
- Young, N. K., Boles, S. M., & Otero, C. (2007). Parental substance use disorders and child maltreatment: Overlap, gaps, and opportunities. *Child Maltreatment*, 12(2), 137-149. <https://doi.org/10.1177/1077559507300322>
- Yuan, N. P., Duran, B. M., Walters, K. L., Pearson, C. R., & Evans-Campbell, T. A. (2014). Alcohol misuse and associations with childhood maltreatment and out-of-home placement among urban two-spirit American Indian and Alaska native people. *International Journal of Environmental Research and Public Health*, 11(10), 10461-10479. <https://doi.org/10.3390/ijerph111010461>
- Zajac, L., Raby, K. L., & Dozier, M. (2018). Attachment state of mind and childhood experiences of maltreatment as predictors of sensitive care from infancy through middle childhood: Results from a longitudinal study of parents involved with Child

Protective Services. *Development and Psychopathology*, 31(1), 1-13.

<https://doi.org/10.1017/S0954579418001554>

Zeanah, C. H., & Benoit, D. (1995). Clinical applications of a parent perception interview in infant mental health. *Child and Adolescent Psychiatric Clinics of North America*, 4(3), 539-554.

Zeanah, C. H., Benoit, D., Barton, M. L., & Hirshberg, L. (1996). *Working Model of the Child Interview coding manual*: Unpublished manuscript.

Zeanah, C. H., & Gleason, M. M. (2015). Annual research review: Attachment disorders in early childhood – clinical presentation, causes, correlates, and treatment. *Journal of Child Psychology and Psychiatry*, 56(3), 207-222. <https://doi.org/10.1111/jcpp.12347>

Zhou, Y. Q., Chew, Q. R. C., Lee, M., Zhou, J., Chong, D., Quah, S. H., . . . Tan, L. J. (2017). Evaluation of Positive Parenting Programme (Triple P) in Singapore: Improving parenting practices and preventing risks for recurrence of maltreatment. *Children and Youth Services Review*, 83, 274-284.

<https://doi.org/https://doi.org/10.1016/j.childyouth.2017.10.029>

Appendices

Appendix A

Supplementary material: detailed table of studies

STUDY #1					
Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	Study and control intervention	Outcomes (Effect size?)	Risk for bias (Cochrane criteria), comments (authors' evaluation)
Parent-Child Interaction Therapy with physically abusive parents: Efficacy for reducing future abuse reports (Chaffin et al., 2004) United States	110 parent-child dyads who met inclusion criteria and consented (out of a possible 300) "Parents" included step-parents or others in a parental role Inclusion criteria: entering child welfare system for a confirmed physical abuse report, abusive parent and child available for treatment and the child was between 4 and 12 years, the abusive parent had an IQ over 70 and the abusive parent did not have a report as a perpetrator of sexual abuse Parents had average of 2 prior physical abuse reports and 2 prior neglect reports Main reason for exclusion: parent refused treatment of any kind (48% of non-participants)	Randomised trial (randomisation procedure not reported) Main outcome: Subsequent reports of neglect or physical abuse by the identified parent	Three conditions All: regular sessions over 6 months Parent-Child Interaction Therapy (PCIT) condition (n = 42): 3 modules, with the first one designed to increase motivation, the second phase of Child Directed Interaction teaching relationship enhancement skills & a daily positive parent-child interaction time, using live coaching, modelling and feedback, and the third phase of Parent Directed Interaction teaching command-giving skills and a behavioural protocol for using time out to gain compliance. Some modifications were made to the manualised programme, and 4 follow up sessions were held after completing PCIT. Enhanced PCIT (E-PCIT) condition (n = 33): The same as above, with individualised enhanced services added to target issues such as depression, substance use or family violence. Home visits to generalise PCIT skills, and CBT and/or medication as needed were also provided. Standard community group (n = 35):	% of families re-referred to CPS for physical abuse over follow up time (median=850 days from baseline): 19% of parents in PCIT condition 36% of parents in E-PCIT condition 49% of parents in community group condition Effect sizes PCIT vs control: $OR = 0.25$ (0.09 – 0.69, $p = 0.007$) E-PCIT vs control: $OR = 0.61$ (0.23 – 1.60, n.s.) PCIT vs E-PCIT: $OR = 0.41$ (0.14 – 1.17, n.s.) % of families re-referred to CPS for neglect: 26% of families across all conditions (no significant treatment group differences)	Selection bias? No Performance bias? Possible (examined in both PCIT conditions, but not possible in community group condition) Detection bias? No (controlled) Attrition bias? No (controlled) Reporting bias? No Other biases? Exclusion of parents with low IQ, and parents who refused treatment (i.e. all participants the "more willing" group out of potential participants; nearly 2/3 referred parents were not included) Efficacy trial not real-world effectiveness trial Multi-component intervention with adaptations to "basic" PCIT – not possible to disentangle which components led to change Findings overall support the social-learning theory-based change model upon which PCIT is built. Physical abuse recurrence reduction in the PCIT condition is the evidence for this (as opposed to neglect recurrence reduction, which did not occur) Some motivation was clearly a minimal requirement.

			Manualised group psychoeducation consisting of 3 modules. Firstly, 6 sessions of orientation (listening skills, understanding of parenting and own parenting background). The second module has 12 sessions of parenting skills, and the third module is 12 sessions on anger management. Teaching is didactic.		
STUDY #2					
Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	Study and control intervention	Outcomes (Effect size?)	Risk for bias (Cochrane criteria), comments (authors' evaluation)
<p>A combined motivation and parent-child interaction therapy package reduces child welfare recidivism in a randomized dismantling field trial (Chaffin et al., 2011)</p> <p>United States</p>	<p>153 parent-child dyads* who met inclusion criteria and consented "Parents" included step-parents or others in a parental role</p> <p>Inclusion criteria: referral to programme by CPS for abuse or neglect, parent and child available for treatment and the child was between 2.5 and 12 years, the abusive parent had an IQ over 65</p> <p>*Out of a possible 291; 14% declined, 13% were ineligible, 13% were lost to non-engagement/attrition, 7% had their parental rights terminated</p> <p>Overall: 47% of original referrals not included in study</p> <p>Parents had average of 6 prior reports to CPS, most (70%) for neglect</p>	<p>Randomised dismantling trial (2x2 unblinded, computer-generated sequentially randomised design) with four conditions: SM + PCIT; SM + SAU; SAU + PCIT; SAU + SAU)</p> <p>Main outcome: CPS database records, screened to avoid duplicated abuse events.</p>	<p>Two orientation conditions, and then two parenting conditions</p> <p>Self-motivating (SM) orientation condition: manualised group programme with a protocol derived from motivational interviewing principles (mean sessions received: 5.2)</p> <p>Services as usual (SAU) orientation condition: manualised group programme based on information about child abuse, roles, and links between parents' childhood and current parenting (mean sessions received: 5.2)</p> <p>PCIT parenting condition: two-component, in vivo parenting intervention using modelling, coaching and feedback. Child-directed play skills are taught first (to increase desirable behaviour and strengthen the relationship), and then parent-directed interaction is taught (to improve behaviour management skills) (mean sessions received: 10.1)</p> <p>Services as usual (SAU) parenting condition: weekly didactic parenting group teaching child development and parenting skills, with time for group discussion (unpublished manual). Additional sessions on compassionate</p>	<p>Raw (unadjusted) recidivism rate per treatment condition (median follow-up= 904 days from baseline): SM + PCIT: 29% SM + SAU: 34% SAU + SAU: 41% SAU + PCIT: 47%</p> <p>Effect sizes SM+PCIT vs SAU+SAU: $OR = 0.61$, (0.23 – 1.60, n.s.) SAU+PCIT vs SAU+SAU: $OR = 1.32$ (0.54 – 3.23, n.s.) SM+SAU vs SAU+SAU: $OR = 0.76$ (0.31 – 1.86, n.s.) SM+PCIT vs SAU+PCIT: $OR = 0.47$ (0.17-1.25, n.s.)</p> <p>After modelling (two models: exposure-adjusted survival times with fully risk-deprived cases removed, and an imputation model for survival outcomes for partial or fully risk-deprived cases): Clear advantage of SM + PCIT condition compared with the means of the other three conditions, except in families where children were not returned for a long time (i.e. fewer opportunities to implement new skills)</p> <p>Covariate main effects: Higher participant ages → longer time before subsequent referral to CPS Higher no. of children in home → longer time before subsequent referral to</p>	<p>Selection bias? No Performance bias? Yes – therapists and participants knew of allocation by necessity Detection bias? Unclear Attrition bias? Yes – reported fully by authors & accounted for in analysis Reporting bias? No Other biases? Overall, 47% of original referrals not included – findings cannot be generalised to referral group, only for group who participated and were retained in the study</p> <p>The complexity of the analysis design in order to identify real effects - accounting for the risk deprivation among the participants - exemplifies the complexity of real-world research with this population.</p> <p>Combined with findings from Chaffin et al. (2009), suggests that SM + PCIT more effective at reducing subsequent abuse for parents who have access to their children, who do not have an intellectual disability and whose motivation at the beginning of the intervention was low-moderate. Taken with the higher recidivism rate in SAU + PCIT, PCIT alone does not show a clear advantage.</p>

			parenting, and parent counselling, were also delivered (mean parenting sessions received: 9.0; mean total sessions: 19.4)	CPS Higher no. of prior referrals → shorter time before subsequent referral to CPS	
			STUDY #3		
Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	Study and control intervention	Outcomes (Effect size?)	Risk for bias (Cochrane criteria), comments (authors' evaluation)
Using recidivism data to evaluate Project Safecare: Teaching bonding, safety and healthcare skills to parents (Gershater-Molko et al., 2002) United States	82 families; 41 in the Project Safecare Group and 41 in the comparison group. All families had current involvement with CPS due to recent substantiated reports of child abuse or neglect Families only included in analysis if completed all training and post-treatment measures (rates of non-completion were not reported). No further inclusion or exclusion criteria reported. The comparison group were matched to the intervention group on the child's age, CPS involvement and geographical location.	Trial with comparison group with 36-month follow-up Reports of child abuse and neglect from CPS (recidivism rates)	Two conditions Project SafeCare: training in three aspects of childcare – health, bonding and safety. Training components were taught over 24 weeks, with up to six sessions per topic. Parents had to attain goals of treatment in observed role-play in order to move on to the next treatment component. Delivery model included modeling, practice and feedback of skills as well as traditional parent education Project SafeCare was based on Project 12-Ways, extracting three components that were thought to be most salient (Lutzger et al. 1998, cited in Gershater-Molko et al., 2002) Family Preservation Group (comparison group): few details reported, but service philosophy is time-limited, family-centred, home based and crisis-oriented. Services available 24/7, family empowerment model, individualised service that includes a variety of social and psychological supports	Statistically significant reduction of child abuse and neglect reports (follow-up period=36 months post-intervention). Recidivism rate: Project SafeCare: 15% Family Preservation group: 46% Effect sizes Project SafeCare <i>OR</i> = 0.20 (95% CI = 0.07-0.57) However, at up until about 12 months following the beginning of the intervention, no significant differences between the groups were found. Over the 4 years that Project SafeCare was in effect: Repeated measures analysis for baseline and post-contact for each year showed significant differences between and within groups in favour of Project SafeCare. Both conditions were <i>less</i> effective with families with low initial rates of child abuse and neglect	Selection bias? Yes – participants were specifically referred for each condition, without report on how this decision was made Performance bias? Yes neither participants nor personnel blind to condition Detection bias? Yes but attempted to control for this through reliability checks Attrition bias? Yes attrition not reported, nor were number/type of sessions in comparison condition Reporting bias? Yes, reliance on substantiated findings of abuse may have dampened results of overall trial Other biases? No intent-to-treat analysis, insufficient reporting of participant characteristics by condition Lack of randomisation to condition and removal of non-completers of the intervention condition (without reporting on numbers) undermined the results of this study. Length of time to show intervention differences suggest that either the overall prevalence of child abuse & neglect in the sample may have been too low to be sensitive to differences, or the definition (substantiated findings) of outcome measure may have been too blunt

STUDY #4					
Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	Study and control intervention	Outcomes (Effect size?)	Risk for bias (Cochrane criteria), comments (authors' evaluation)
Improving parenting in families referred for child maltreatment: A randomised controlled trial examining effects of Project Support (Jouriles et al., 2010) United States	35 families (out of 76 screened), all of whom had substantiated allegations of physical abuse (63%), neglect (25%) or both (12%) 50% had at least one prior referral to CPS as well Exclusion criteria: non-English-speaking or not a legal guardian, intellectual disability in child or parent, severe substance use warranting treatment, or severe parental psychopathology (suicidality or active psychosis)	Randomised controlled trial with 16-month follow-up 5 assessment time-points: baseline, 4, 8, 12 and 16 months Main outcome: Re-referrals for child maltreatment, coded dichotomously	Two conditions: intervention and services as usual Families rewarded for participation (in both conditions) Intervention condition (n = 17): Home visits weekly for 8 months, then monthly contact for 8 months, mean no. of sessions was 22 Manualised with flexibility in-built: based on assessment and a tailored intervention 2 components: behaviour management skills training (teaching, homework, role-play, observational feedback and written materials) with a goal of mastery, and emotional and material support to mothers. Theoretical basis: social learning theory Comparison condition (n = 18): Routine CPS services (variety of no treatment, parenting intervention from community agencies, family therapy, counseling, videotaped instruction) and monthly contact for 16 months	No significant differences between groups. Recidivism rate (16-months post-baseline): Intervention group: 5.9% Comparison group: 27.7% (non-significant result) Effect sizes calculated by author: <i>OR</i> = 0.16 (0.02 – 1.57, n.s.)	Selection bias? Yes (inadequate concealment) Performance bias? Yes Detection bias? Yes Attrition bias? No Reporting bias? Unclear Other biases? Possible sample bias due to higher rates of physical abuse rather than neglect, compared to typical CPS sample Small sample size Excluded parents with severe mental illness from study (as well as A&D) – which meant that the original 76 families who were eligible for the study were reduced to 35, less than half of the CPS-referred sample and may have been less severe, limiting the generalisability Intervention was more resource-intensive than comparison group

Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	STUDY #5		Risk for bias (Cochrane criteria), comments (authors' evaluation)
			Study and control intervention	Outcomes (Effect size?)	
Effectiveness of home visitation by public-health nurses in the prevention of the recurrence of child physical abuse and neglect: A randomised controlled trial (MacMillan et al., 2005) Canada	<p>163 families (224 in initial sample), of whom CPS records were available at 3 years' follow up for 160. 139 families for whom full sets of data were available</p> <p>Families were eligible if they had a reported abuse or neglect incident within the previous 3 months, the child <13 years, the child remained in the parents' care and the family spoke English. Families had an average of 2.9-3.0 previous referrals to CPS</p> <p>Families were excluded from the study if the abuse incident was sexual or the abuse was committed by a foster parent.</p>	<p>Randomised controlled trial with 3 years' follow-up from baseline (the intervention start)</p> <p>Main outcome: CPS reports of child abuse or neglect (standardised and independently coded by adjudicators blind to condition)</p>	<p>Two conditions</p> <p>Intervention group: same as control (standard services from CPS) as well as home visits for 2 years (initially weekly then moving to monthly) by a nurse. Focus of visits: intensive family support, parent education and referrals to other services. Nurses trained using manualised programme; visits themselves not manualised but were individually tailored to families' needs (median home visits: 46).</p> <p>Control group: risk assessment, parenting education and referrals to agencies for support services.</p>	<p>Main outcome: No significant differences between groups on CPS records. Recidivism rate (3 years post-baseline): Intervention group: 43% Control group: 33%</p> <p>Effect sizes: Nurse home-visiting $OR = 1.52$ (0.80 – 2.90, n.s.)</p> <p>Effect sizes calculated on hospital records for abuse or neglect (significant result): Nurse home-visiting $OR=0.39$ (95%CI 0.16-0.95)</p> <p>No significant differences between groups in terms of characteristics (sex, age, complexity of problems, severity of incidents etc).</p> <p>Significant difference within both groups with regard to non-completers (attrition): 50% of men (n=8) vs. 20% of women (n=155); more non-completers than completers reported they were "very happy".</p>	<p>Selection bias? No Performance bias? Yes - participants not blinded; health professionals not blinded Detection bias? No; assessors blind to condition Attrition bias? No Reporting bias? No Other biases? Possible surveillance bias in intervention group</p> <p>Inter-rater reliability moderate for adjudicators' classifications of abuse or neglect incidents (0.54-0.88)</p> <p>Possible that intervention was insufficient duration or intensity.</p> <p>Significant result in favour of control group, suggesting possible iatrogenic effect of intervention.</p> <p>This study was very well designed with a good follow-up period, and demonstrates that nurse home visits are ineffective at preventing the recurrence of child maltreatment in families already involved in CPS.</p>

Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	STUDY #6		Risk for bias (Cochrane criteria), comments (authors' evaluation)
			Study and control intervention	Outcomes (Effect size?)	
<p>Dosage matters: The relationship between participation in the Nurturing Parenting Program for infants, toddlers and preschoolers and subsequent child maltreatment (Maher et al., 2011)</p> <p>United States</p>	<p>528 parents or caregivers with children under 6 years, with CPS involvement due to allegations of abuse or neglect, and assessed as needing parent education. Mean prior CPS referrals: 1.2</p> <p>Parents were screened out (n=50) for "circumstances and behaviours that would prevent constructive participation" such as cognitive impairment, substance abuse or work barriers, although not all parents with these challenges were screened out (methods for this not sufficiently described).</p>	<p>Pre-post trial with 2-year follow-up</p> <p><i>NB focus of current study was associations between number of sessions attended and outcomes, rather than an effectiveness trial</i></p> <p>Main outcome: Reported and substantiated maltreatment based on CPS data at 2-year follow-up</p>	<p>One cohort, one condition, two groups</p> <p>Intervention: Nurturing Parent Program (NPP) is a manualised group-based parenting programme for parents of infants-preschoolers based on social learning theory. It focuses on parental self-awareness and empowerment, empathy, child development and discipline, emotional communication, behaviour skills training, routines and child safety. Involves children in the learning process.</p> <p>Method of delivery: 16 group sessions using lesson guides, DVDs, handbooks, assessment inventories, modelling, role-play, discussion and family activities. Resources are written to 5th-grade level. Group sessions were 2.5 hours; home catch-up sessions were 1 hour. Mean number of sessions attended: 17.5</p>	<p>Main outcome (follow-up=2 years post-intervention):</p> <p>33.7% of participants had a reported maltreatment incident</p> <p>16.9% substantiated maltreatment incident</p> <p>Secondary outcomes:</p> <p>6.8% 6 months post-completion substantiated child maltreatment rate</p> <p>13.8% 6 months post-completion reported child maltreatment rate</p> <p>Other outcomes:</p> <p>NPP dosage correlated with subsequent reports and findings of maltreatment: 18% of parents who attended just 3 sessions had a maltreatment report within 6 months vs 11% of parents who attended 18 sessions, but no significant differences between the two groups on substantiated maltreatment</p> <p>After 2 years, 20% of parents who attended just 3 sessions had a substantiated maltreatment finding within 2 years vs. 13% of parents who attended 18 sessions, but no significant differences between the two groups on reported maltreatment</p> <p>For each additional NPP session completed, parents had a 3.3% lower chance of having a substantiated maltreatment incident.</p> <p>Other variables predictive of subsequent maltreatment: more children and lower education.</p> <p>Parents who reported own childhood maltreatment by a family member less likely to have substantiated maltreatment incident within 6 months post-intervention.</p>	<p>Selection bias? Possible due to insufficient information on screening procedures & unmeasured differences</p> <p>Performance bias? N/A (one condition)</p> <p>Detection bias? Possible</p> <p>Attrition bias? Yes, authors report different intervention retention based on which centre attended</p> <p>Reporting bias? No</p> <p>Other biases? Study did not control for risk deprivation (i.e. opportunity to maltreat) due to children being in out-of-home care</p> <p>Results may well have been confounded by differentiation by reports vs substantiation of maltreatment – analysis treating all incidents as equal may have erased significance of dosage effects in further analysis. Assumption by authors that there is a "true" difference between reports and substantiation.</p> <p>Strength of study: used a full, statewide cohort or parents (bar parents excluded) receiving the same intervention.</p> <p>Alternative hypothesis based on findings: that parents who are low attenders are more likely to maltreat than parents who are high attenders (a confounding variable not measured)</p> <p>Prior substantiated maltreatment not a significant predictor of outcomes (but maltreatment report histories not reported).</p>

Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	STUDY #7		Risk for bias (Cochrane criteria), comments (authors' evaluation)
			Study and control intervention	Outcomes (Effect size?)	
<p>Promoting First Relationships: Randomised trial of a 10-week home visiting program with families referred to child protective services (Oxford et al., 2016)</p> <p>United States</p>	<p>Families with 10-24-month old infants reported to CPS for alleged maltreatment with an "open case" (384 eligible and contactable out of an identified 1070; 48% unreachable or no space in programme)</p> <p>Final randomised n=247; 124 in PFR condition and 123 in R&R condition. Parents were paid to be participants in the study (but not for completing the intervention)</p> <p>Eligibility: parents had a home and spoke English</p>	<p>Randomised controlled trial with 1-year follow-up</p> <p>Main outcomes: records of new maltreatment allegations and CPS child removals between baseline and 12 months post-intervention</p>	<p>Two conditions</p> <p>Intervention: Promoting First Relationships (PFR) is a manualised 10-week home visiting service aiming to: increase caregivers' awareness of children's social and emotional needs, as well as awareness of their own needs as parents. PFR facilitators focus on the relationship between the child and the parent.</p> <p>Method of delivery: video-based feedback with parents (5 recorded across 10 sessions), with a focus on parent behaviour and child responses. Facilitators trained to avoid inducing guilt or shame in caregivers. 86% of participants completed 10 sessions.</p> <p>Control: Resource and Referral Services (R&R), 3 telephone sessions comprising 30mins (needs assessment) then 10 mins, and 10 mins, to identify needs and help families find resources. In addition to referrals, the social worker provided resources to the families (mean=6). 89% of participants completed 3 telephone sessions.</p>	<p>Intent-to-treat analysis (follow-up=12 months post-intervention)</p> <p>Main outcome: no significant differences between groups on reported maltreatment.</p> <p>Recidivism rate: PFR condition: 29% R&R condition: 31%</p> <p>Effect sizes: Promoting First Relationships $OR=0.79$ (0.46 – 1.35, n.s.)</p> <p>Children in PFR condition were less likely to be removed from parents' care (5.6% in PFR condition vs 13% in R&R condition; R&R condition families were 2.5x more likely to be removed) within 1 year post-intervention</p>	<p>Selection bias? No Performance bias? No, assessors blind to condition Detection bias? No Attrition bias? No Reporting bias? No Other biases? Possible surveillance effects (i.e. facilitators reporting maltreatment – not reported)</p> <p>1-year post-intervention may have been too short a follow-up period to detect significant effects</p> <p>Good completion rates</p> <p>Very high numbers of originally identified families (i.e. families with maltreatment referral and a child within the age range) were either not contactable or ineligible, so less than one quarter (23%) were included in trial, meaning that results are only generalisable to parents who are eligible, contactable and consenting to participate, even with financial inducement. Authors suggest access to a phone, or answering calls from unknown numbers, as possible explanation for low participation rates.</p>

Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	STUDY #8		Risk for bias (Cochrane criteria), comments (authors' evaluation)
			Study and control intervention	Outcomes (Effect size?)	
<p>A Randomized Trial of Home Visitation for CPS-Involved Families: The Moderating Impact of Maternal Depression and CPS History (Jonson-Reid et al., 2018)</p> <p>United States</p>	<p>122 families (159 individual children) with at least 1 child from 2-30 months, who were CPS-referred but not court-mandated. 53% (n = 63) of the original 122 families were retained at the 18-month follow-up from baseline. 66% had prior CPS involvement</p> <p>Exclusion criteria: child had developmental delays at birth, family were already receiving early intervention</p>	<p>Randomised controlled trial with a 18-month follow-up from baseline interviews <i>NB the CPS workers were randomised to treatment or control, not the families</i></p> <p>Main outcome: official child maltreatment reports, whether substantiated or not</p>	<p>2 conditions</p> <p>Intervention: Parents As Teachers (ECC-PAT; n = 93) is a manualised paraprofessional home-visiting programme with a child development and parenting curriculum, and a service period up to 3 years if a child is enrolled at birth. CPS workers assigned to this condition received training on child development, HV programming & the goals of the study. Families continued receiving home-visits for an average of 13.8 months.</p> <p>Control: usual care CPS (n = 77). Usual care CPS workers assigned to this condition received a brief training on child development and its importance in CPS-involved families, but were not given additional training on HV services or told the complete intent of the study at the time. Contact with CPS for families in this condition varied, with an average of 8.6 visits.</p>	<p>Intent-to-treat analysis (follow-up=18 months from baseline)</p> <p>Main outcome: no significant difference between the two groups in the proportion of children with re-reports to CPS. Recidivism rate:</p> <p>ECC-PAT: 41.9% Controls: 54.8%</p> <p>Effect sizes: Home-visitation $OR = 0.60$ (0.33 – 1.11, n.s.)</p> <p>Among families where there <i>was</i> prior CPS involvement (66% of sample), there was no difference in re-report rates.</p> <p>Among parents not depressed at baseline, there was a significant difference by condition: lower rates of re-reports of abuse in treatment condition: ECC-PAT: 25.7% Controls: 67.6%</p>	<p>Selection bias? Yes (CPS workers did not refer all eligible families) Performance bias? Yes Detection bias? Probable (families knew condition, & treatment families had extra outcome assessments) Attrition bias? Possible – high attrition Reporting bias? No Other biases? No</p> <p>Analyses separating those with a single CPS referral (who can be characterised as “lower-risk”) from those with prior CPS involvement (“higher-risk”) was useful: findings suggest that ECC-PAT was beneficial for CPS-referred families, where the mother is not depressed and there is no prior CPS involvement for the family.</p> <p>Article highlights real-world challenges of research in this field. Due to constraints, unable to identify whether referred families differed in important ways from non-referred families. CPS workers’ decisions a potential confounding factor.</p> <p>Good retention rate, suggesting home-visiting is a method more acceptable to CPS-involved families than other treatment methods</p> <p>Overall findings consistent with other studies: home-visiting not effective at reducing child maltreatment where it is already occurring, and maternal depression is a significant moderator of treatment outcomes.</p>

STUDY #9					
Paper title and authors, country	Participants and criteria for inclusion	Methodological approach and measures	Study and control intervention	Outcomes (Effect size?)	Risk for bias (Cochrane criteria), comments (authors' evaluation)
<p>A Statewide Trial of the SafeCare home-based Services Model With Parents in Child Protective Services (Chaffin et al., 2012)</p> <p>United States</p>	<p>2175 parents or caregivers referred for intervention by CPS (out of an initial sample of 3116 approached for participants; 834 declined or did not complete enrolment, 23 were ineligible, 84 were withdrawn after enrolment). Most participants (76%) had a preschool child but families with a child up to 12 were included in the study)</p> <p>Mean prior CPS reports: 4.73</p> <p>Exclusion criteria: parent as sexual abuser</p>	<p>Randomised cluster experiment comparing SafeCare to Services As Usual (SC vs SAU) and Coached to Uncoached (C vs UC)</p> <p>2 x 2 design, yielding four conditions: SAU + UC, SAU + C, SC + UC, SAU + C</p> <p>6 regions were assigned to either SAU or SC. Then, teams of home-visitors were assigned to coached or uncoached conditions.</p> <p>Main outcome: CPS reports during a mean 6-year follow up period from baseline</p>	<p>4 conditions: 2 intervention conditions, and then 2 quality control conditions</p> <p>Intervention – SafeCare: SafeCare is a manualised parenting intervention that was delivered as one component of a home-visiting service. It uses behavioural skill training, including roleplay to criterion, to cover: parent/child interaction, routines, safety and child health. It includes a component on appropriate supervision of children. Duration was at least weekly for six months.</p> <p>Comparison – Services As Usual: This consisted of the same number of sessions and duration as the intervention condition, with similar goals but without the SafeCare components and structure. Services were delivered in a ‘discussion oriented’ manner.</p> <p>Quality control – Coached: Coaches were selected for their suitability and trained in Stoltenberg’s developmental consultation model and observed home visitors in vivo at least monthly (Stoltenberg & McNeill, 2010, cited in Chaffin et al., 2012). SC coaches used fidelity checklists and had additional SC training.</p> <p>Quality control – Uncoached: Coaches focused on general service issues akin to a supervision relationship, using problem-solving rather than focusing on treatment fidelity.</p>	<p>Intent-to-treat analysis (follow-up period—approximately 6 years from baseline)</p> <p>Main outcome: significant risk reduction for maltreatment recidivism among the SafeCare participants, with hazard ratios of 0.74-0.83 (95% CI = 0.58-0.98)</p> <p>Recidivism rates: SAU condition: 45% SC condition: 34.65-38.6% (calculated by authors based on ‘estimated number needed to treat’, as this was not reported within article)</p> <p>Risk prediction estimates were calculated through administrative data and screening scores on depression, substance use and resources measures. This estimate was significantly predictive of observed recidivism in the study sample (est=0.50).</p> <p>Treatment effects stronger among parents of preschoolers with no substance use disorder.</p> <p>Participants receiving the coached condition were less likely to have a further CPS report than those in the uncoached condition, with a hazard ratio of 0.85 (95% CI=0.73-0.99) in one model, but this effect was less consistent across models than the main SafeCare effect.</p> <p>Treatment compliance (i.e. not missing more than 3 sessions or refusing services) significantly predicted recidivism with a hazard ratio of 0.73 (95% CI= 0.57-0.94)</p>	<p>Selection bias? Yes, SAU and SC regions assigned at region level within state, home visitors randomised to C or UC</p> <p>Performance bias? Yes home visitors not blind to condition</p> <p>Detection bias? No</p> <p>Attrition bias? No</p> <p>Reporting bias? Unclear</p> <p>Other biases? No</p> <p>Treatment compliance had a greater impact on recidivism rates across all conditions than condition.</p> <p>Real-world, state-wide and large-scale effectiveness trial showing that rates of child neglect were reduced among a population of maltreating parents. However, the ‘real’ reduction in rates of re-notification are modest (9-16 parents would need to receive the intervention for one of them to have no CPS reports within the first year). Yet this may be an under-estimation of SC effects as the SAU intervention was high-quality and there was likely content overlap.</p> <p>SafeCare intervention designed to address child neglect. Population would be considered ‘severe’ with high mean rate of prior CPS notifications. Examination of CPS reports by type would have been useful as neglect specifically targeted by the SC intervention.</p>

Appendix B

Table of models of parenting capacity assessment in child welfare

Model	Description (domains, focuses and guidelines)	Strengths & Limitations
1. Assessing parenting capacity in a child welfare context (Budd, 2005)		
	<p><i>3 core features and 3 phases</i></p> <p><i>Features:</i> focus on parenting, use a functional approach, apply a minimal parenting standard</p> <p><i>Phase 1 planning:</i> clarify the purpose of the assessment and review background information</p> <p><i>Phase 2 collecting data:</i> parent interview over multiple sessions, informed consent, establishing rapport, administer questionnaires, direct observation of parent-child interaction, interviews with third-party informants, focus on individual child needs</p> <p><i>Phase 3 analysis and report-writing:</i> integrating information, identifying discrepancies, judging the importance of data and what to include, providing a balance of strengths and weaknesses, conservative explanations and descriptions of possible directions for intervention and likely future issues</p>	<p><i>Limitations</i></p> <p>Cross-sectional (although multiple sessions are recommended)</p> <p>Does not include direct assessment of the child in order to identify individual needs</p> <p>Does not provide sufficient guidance on decision-making and intervention-planning process</p> <p><i>Strengths</i></p> <p>Focus on minimal standard and core function of parenting</p> <p>Provides guidance on how to synthesise information and prioritise salience</p>
2. Assessing for Parenting Capacity; The least detrimental alternative: A systemic guide for children in care. (Steinhauer, 1983, 1991)		
	<p><i>4 focuses and 9 guidelines</i></p> <p><i>Focus 1:</i> Context - information regarding the child in the context of the family, current family situation with particular regard to the parent's ability to meet the needs of the child, situational stressors</p> <p><i>Focus 2:</i> Child –a comprehensive developmental assessment including historical trajectories of social, emotional and cognitive functioning</p> <p><i>Focus 3:</i> Parent-Child Relationship - a history of the parent-child relationship, current attachment status, direct observations of current parenting behaviours and interactions with the child</p> <p><i>Focus 4:</i> Parent – assessing the parent's ability to inhibit impulses, their acceptance of responsibility for parenting, behaviours (such as drug and alcohol use) that might affect parenting capacity, engagement with society, and response to parenting and other types of interventions</p>	<p><i>Limitations</i></p> <p>Cross-sectional</p> <p>Does not identify directions for intervention, or indicators for change</p> <p>Does not explicitly describe how to synthesise information or prioritise salience</p> <p><i>Strengths</i></p> <p>Comprehensive, ecological-transactional</p> <p>Focus on minimal standard and core function of parenting</p> <p>Includes parent's historical behaviour and child's developmental trajectory</p> <p>Provides guidance for decision-making, along with profiles of parents whose capacity is severely impaired vs those whose parenting is likely to respond to supports</p>
3. Child protection evaluations: The forensic stepchild (Kuehnle et al., 2000)		

<p><i>4 factors, 11 sub-factors, 35 domains</i></p> <p>The authors briefly describe the required expertise of the assessor: they should have a “comprehensive knowledge” of the research on family violence and be competent to conduct forensic/maltreatment evaluations. Assessors to be conversant with relevant guidelines on methodology, ethics and cultural responsiveness.</p> <p><i>Factor 1 parent factors:</i> parent’s ability to meet their child’s needs, including their own stability, their personal history (including own history of abuse, substance use, mental illness, education and criminal history), any previous maltreatment reports (including nature, chronicity and parent’s sense of responsibility), parenting skills (including knowledge of child’s needs, ability to keep child safe and discipline methods), rehabilitation needs (considering the estimated timeframes and availability of services)</p> <p><i>Factor 2 environment factors:</i> socio-economic and employment status, social support (including extended family with and without substance use, criminal behaviour and known child maltreatment; friends; neighbours; community agencies), living arrangements (including its stability and the neighbourhood), family violence and previous intervention outcomes</p> <p><i>Factor 3 child factors:</i> child development and individual needs or impairments (including any disabilities), history of injuries (including failure to thrive, disorders caused by teratogenic exposure, intentional abuse and accidental injury)</p> <p><i>Factor 4 parent-child relationship:</i> parent-to-child commitment and time, quality of the parent-child relationship (including child attachment and communication style), child’s attachment to non-parent figures (including foster parent or relatives)</p>	<p><i>Limitations</i></p> <p>Cross-sectional</p> <p>Does not identify directions for intervention, or indicators for change</p> <p>Does not explicitly describe how to synthesise information or prioritise salience</p> <p>No explicit focus on minimally-sufficient parenting</p> <p><i>Strengths</i></p> <p>Comprehensive</p> <p>Significant focus on parent-child relationship</p> <p>Factors based on evidence for association with child maltreatment</p> <p>Describes competencies needed by the assessor</p>
<p>4. Assessing parenting capacity in child protection: towards a knowledge-based model (Houston, 2016)</p>	
<p><i>3 themes and 7 dimensions</i></p> <p><i>Themes:</i> strengths-based approach to parenting assessment, social ecology, context and networks and culturally-sensitive/anti-oppressive value base for the assessor (p. 349)</p> <p><i>Dimension 1, key attributes of parenting:</i> parental behaviour, including their belief systems, strengths, areas for concern, basic parenting functions including attachment, parenting characteristics that influence child development and relational ‘fit’</p> <p><i>Dimension 2, problem-solving:</i> capacity to respond to everyday challenges of parenting and family, with two areas of focus that include ‘instrumental problems’ (daily hassles, resources etc) and ‘affective problems’ (intense feelings and ability to respond appropriately to children) (p. 352).</p> <p><i>Dimension 3, communication:</i> nature of verbal and non-verbal communication within the family and the parent-child relationship, including rate of warmth to criticism from the parent to the child</p> <p><i>Dimension 4, roles:</i> patterns of caregiving from each parent, marital and social support, ways that roles are allocated and accounted for within a family</p> <p><i>Dimension 5, affective responses:</i> emotional sensitivity to children, emotional availability and responsiveness to partner and children, recognition of emotional needs of the child</p>	<p><i>Limitations</i></p> <p>Does not include direct child assessment</p> <p>Cross-sectional</p> <p>Does not strongly recommend examination of historical behaviour</p> <p>Does not provide guide for decision-making/synthesising information and judging salience of different information</p> <p>No focus on minimally-sufficient, good-enough parenting</p> <p><i>Strengths</i></p> <p>Wary of institutional bias, firmly strengths-based for family interests</p> <p>Ecological transactional</p> <p>Focus on close observation of ‘tone’ within relationships</p>

<p><i>Dimension 6, affective involvement:</i> meaningful engagement with the child, distance or closeness, interest, allowance for privacy and independence</p> <p><i>Dimension 7, behavioural control:</i> ability to reward or give consequences for appropriate or inappropriate child behaviour, this dimension includes child outcomes in terms of their outcomes associated with effective parent behaviour management</p>	
5. Parenting capacity (Donald & Jureidini, 2004)	
<p><i>7 steps, 4 primary domains, 11 modulating effects</i></p> <p><i>Domain 1:</i> parent's relationship capacity, including the ability to recognise and place the child's needs ahead of one's own, an understanding of the effects of stress on their children, parental sense of responsibility for abuse and other behaviour and the ability to inhibit impulses keep themselves and their children safe</p> <p><i>Domain 2:</i> parental sense of responsibility for ensuring their child's environment is safe</p> <p><i>Domain 3:</i> ability to recognise potential impacts of family of origin's parenting on own parenting</p> <p><i>Domain 4:</i> day-to-day care for the child's physical and emotional wellbeing, matched to the child's individual and developmental needs</p> <p><i>Modulating effects with regard to 'child's parentability'</i> (p. 11): individual needs due to physical, emotional, behavioural or developmental problems, the impact of the maltreatment on the child (in turn impacted by severity of abuse and the child's prior functioning), age and stage of child at time of maltreatment and the parent's view of that child</p> <p><i>Modulating effects with regard to 'scaffolding for parenting'</i> (p. 11): prior knowledge and experience, partner support, extended family and other supports, drug and alcohol use, lack of financial resources, experiences of the court system, and past relationships with, and responses to, other professionals</p>	<p><i>Limitations</i></p> <p>Does not explicitly provide guide for decision-making/synthesising salience of different information (although this is guided through consideration of modulating factors)</p> <p>Does not explicitly address culture or impact of systemic bias</p> <p><i>Strengths</i></p> <p>Uniquely uses report feedback process as part of data information recommendations – parental expressed responsibility (or lack of this) as factor in decision-making</p> <p>Focus on <i>process</i> of assessment rather than specific content – acknowledgement that assessment follows referral/planning</p> <p>Strong focus on parenting characteristics likely to be relevant to capacity in maltreatment context (sense of responsibility, impulsivity)</p>
6. Evidence-based assessments of children and families: Safeguarding Children Assessment and Analysis Framework (Pizzey et al., 2017)	
<p><i>7-stage model with 7 key principles</i></p> <p><i>Principles:</i> child-centred & underpinned by child development, ecological, identifying both strengths and difficulties, analytical, grounded in evidence and aimed at improving child outcomes (Pizzey et al., 2017, p. 202)</p> <p><i>Stage 1:</i> look at the nature and requirements of the referral and assessment aims to establish direction and focus. Includes consideration of whether the child is at any immediate risk of harm</p> <p><i>Stage 2:</i> gathering of data on child's developmental needs, parental capacity, family factors and environmental factors using a range of appropriate methods and involves creating a chronology</p> <p><i>Stage 3:</i> identify any impairments in the child's health and development across a range of domains of functioning and organise information under the Assessment Framework triangle (p. 205). Identify gaps in information</p>	<p><i>Limitations</i></p> <p>Does not specify information to be gathered – assumes knowledge on the part of the assessor</p> <p>Does not explicitly address culture or impact of systemic bias</p> <p>Cross-sectional</p> <p>Time-consuming and stages could be redundant (stages 3-5, and stages 6-7)</p> <p>Operational definition of parenting capacity focused on skills</p> <p><i>Strengths</i></p> <p>Explicitly includes the identification of missing information – mitigates risk for bias from limited information</p>

<p><i>Stage 4:</i> analyse the information in order to observe patterns of strengths and weaknesses, looking at the interactions between the child and family, and the family and the environment, and the impact of these on the child's health and development. Severity and impact of primary protective and harmful processes to be considered here</p> <p><i>Stage 5:</i> decision-making and planning. The child's profile of harm and protection, along with the identified processes, to be used to inform a prognosis for the child in terms of future harm and the likelihood of future interventions reducing that harm. Each of these areas to be plotted on a rating scale to create a summary 'grid', which then informs a formulation of predisposing, precipitating, protective and maintaining factors, all related to family functioning and child health and development</p> <p><i>Stage 6:</i> intervention planning, based on the analysis in Stage 5, including priorities for intervention sequelae and markers for progress or the absence of progress, along with resources needed and timeframes</p> <p><i>Stage 7:</i> identifying outcome measures related to the intervention goals, the child's health and development and the family's functioning. These need to be standardised or operationally-defined (with agreed-upon definitions and thresholds)</p>	<p>Structures the analysis process – mitigates risk for bias based on assessor characteristics</p> <p>Includes intervention planning related to analysis of data</p> <p>Includes explicit measurement of intervention outcomes – with reference to child's developmental timeframes</p> <p>Has been reviewed independently and been evaluated via large-scale RCT (which showed no evidence for effectiveness compared to usual processes) (Macdonald et al., 2017)</p>
7. Tuituia assessment framework (Oak, 2016; Oranga Tamariki Ministry for Children, 2019)	
<p><i>3 key domains, 15 sub-domains and 44 factors</i></p> <p><i>Domains:</i> Mokopuna ora (child's health and wellbeing), Kaitiaki mokopuna (parenting capacity), Te ao hurihui (family, sociocultural and environmental contexts for the child)</p> <p>The model provides questions for guiding the assessment of each sub-domain along with scales providing definitions for three points on a 1-10 point scale.</p> <p><i>Sub-domains mokopuna ora:</i> attachments, health, behaviour, identity and culture, friendships, learning and achieving and education. The 'attachments' sub-domain has a further section for sibling and non/adult family members' attachments.</p> <p><i>Sub-domains kaitiaki mokopuna:</i> safety and basic care (protection from harm and risk), safe parenting (mental health, intellectual functioning, substance abuse, physical health, offending and personal resilience), skills and knowledge (knowledge, parenting skills, willingness and capacity to change – including whether they have changed in the past), relationship with child or young person (view of the mokopuna, emotional interaction), guidance and supervision (supervision and oversight, setting boundaries and consequences, role-modelling, supporting learning and achievement)</p> <p><i>Subdomains te ao hurihuri:</i> networks of support (social and community relationships, cultural connectedness, community supports), resources available (housing, employment and finances, basic needs), family/whānau/hapū/iwi (extended family relationships, family/whānau history</p>	<p><i>Limitations</i></p> <p>Cross-sectional</p> <p>Does not explicitly require direct assessment of the child</p> <p>Does not direct assessment towards referral concerns</p> <p>Does not provide a model or process for synthesising information and making decisions about parenting capacity</p> <p>Very light emphasis on parents' past behaviours and the impact on the child of past parenting harms</p> <p>Does not support the 'weighting' of various strengths and challenges within an assessment – appears to present all factors as of equal importance</p> <p>No focus on <i>process</i> of assessment</p> <p>No explicit focus on minimally-sufficient, good-enough parenting</p> <p><i>Strengths</i></p> <p>Model developed specifically for Aotearoa/New Zealand context</p> <p>Comprehensive, covers a very wide range of</p> <p>Provides descriptors and scales for each factor</p> <p>Encompasses domains not explicitly covered by other models such as identity and culture</p>

<p>and functioning, stability). NB all sub-domains in te ao hurihuri have scaling descriptors for both mokopuna ora and kaitiaki oranga views.</p>	
8. A suggested framework for forensic consultation in cases of child abuse and neglect (Barnum, 1997)	
<p><i>4 over-arching questions plus report structure</i> <i>Question 1 – facts (what happened?):</i> evaluators to establish allegations and the bases of these, reporter reliability, any physical evidence including degree of certainty <i>Question 2 – harm (what harm did it cause?):</i> assessment of the impact of abuse or neglect on the child, distinct from other impairments from other causes <i>Question 3 – parenting capacity (what help can the parents provide?):</i> the “emotional, social, and behavioural functioning” that goes into being a good parent (p. 587) <i>Question 4 – prognosis (what hope is there?):</i> consideration of how reasonable plans for reunification are, or whether a parent is likely to improve or deteriorate in their parenting</p> <p><i>Report</i> <i>Demographics and referral question:</i> restates brief and any relevant legal information <i>Structure:</i> description of methodology, confidentiality and consent <i>History:</i> clinical and file history from all sources, organised by chronology or domain of functioning <i>History relevant to parenting:</i> specific data on child safety; individualisation of parenting; cognitive support; discipline; emotional functioning, attachment and nurturing; mental status <i>Summary and opinion:</i> organised into sections – history of abuse/neglect; the impact of the abuse/neglect on the child; parenting capacity with regard to functioning and psychiatric status; risk and treatability (including specific treatment recommendations and prognosis for these, along with timeframes)</p>	<p><i>Limitations</i> Does not explicitly address culture or impact of systemic bias No explicit focus on minimally-sufficient, good-enough parenting Does not support the ‘weighting’ of various strengths and challenges within an assessment – appears to present all factors as of equal importance Does not provide a model or process for synthesising information and making decisions about parenting capacity</p> <p><i>Strengths</i> Clear description of report format Focus on usability within court settings Clarification of some complex issues, e.g. differential diagnosis in assessment of harm</p>
9. Assessing parenting Capacity and parenting issues (Jones, 2009)	
<p><i>6 dimensions, 7 considerations (guidelines), several matrices, grids and checklists</i> In addition to the details below, the author describes the phases of assessment and the methods by which data should be gathered. Matrices are also provided with details and descriptors for factors associated with risk or protection. <i>Guidelines:</i> parenting must be considered as being embedded within context; assessors should maintain developmental perspectives of both adults and children; assessors should take a child’s perspective; parenting is tied to an individual child’s needs; assessors need to identify all caregivers of a child; different settings in which parenting occurs need to be included; and both strengths and difficulties need identification within each dimension <i>Domain A:</i> basic physical care, including food, shelter, hygiene and medical care</p>	<p><i>Limitations</i> Does not require review of file information Does not explicitly address culture or impact of systemic bias No explicit focus on minimally-sufficient, good-enough parenting Not ecological (although context is acknowledged)</p> <p><i>Strengths</i> Attends to the <i>process</i> of assessment Ecological</p>

<p><i>Domain B:</i> ensuring the child's safety, including the ability to recognise potential hazards; safety from other adults or settings and safety from self, as well as more obvious physical hazards</p> <p><i>Domain C:</i> emotional care, including physical affection, kindness and praise; supporting the child to feel valued and connected; creating a sense of identity and stability</p> <p><i>Domain D:</i> supporting the child's cognitive, social and physical development through stimulating opportunities; supporting school attendance and engaging in teaching of skills</p> <p><i>Domain E:</i> guidance and boundaries to support emotional regulation and autonomy</p> <p><i>Domain F:</i> consistency and predictability in responses to support attachment and sense of stability in the child</p>	<p>Provides guidance on the analysis of information with descriptors of protective and predictive factors</p> <p>Provides outline for interview topics to be covered</p> <p>Includes direct assessment of the child and direct observation of parent-child relationship</p>
10. Predicting maltreatment (Browne, 1995)	
<p><i>5 domains</i></p> <p>The author clarifies that child maltreatment occurs within the context of multiple factors: the child, the family, the community and the culture. These are intertwined and interact in cases of child abuse or neglect. The focus of this model is on the assessment of the parent-child relationship, conceptualised by the author as the primary context in which abuse occurs.</p> <p><i>Knowledge and attitudes to child rearing:</i> parents' expectations of their children and whether these are appropriate; discipline and punishment practices related to these; level of awareness of child's development and needs</p> <p><i>Parental perceptions of child behaviour:</i> distorted thinking about child such as the child having high levels of internal control; whether they see the child as demanding; levels of positive perceptions of the child; sensitivity</p> <p><i>Parental emotion and response to stress:</i> stress responses including physiological arousal levels in response to infant emotional expression; levels of impulsivity; emotional regulation when disciplining or attempting to control children</p> <p><i>Parent-child interaction:</i> observations of the rate of reciprocity during parent-child interactions; types of interaction (mutual, failed, or causal); parental sensitivity; interactional processes impacting on rates of child emotional and social behaviours</p> <p><i>Assessment of child attachment to parent:</i> use of the Strange Situation Procedure (Ainsworth, 1978) to classify attachment status of the infant</p>	<p><i>Limitations</i></p> <p>Not ecological (although context is acknowledged)</p> <p>Aside from attachment, does not include direct child assessment</p> <p>No clear focus on minimally-sufficient parenting</p> <p>Does not support the 'weighting' of various strengths and challenges within an assessment</p> <p>Omits a range of relevant information covered by other models</p> <p>Does not explicitly address culture or impact of systemic bias</p> <p><i>Strengths</i></p> <p>Strong focus on 'tone' of parenting, especially warmth and sensitivity</p> <p>Risk-based model</p> <p>Includes descriptors of observable behaviours suggestive of increased risk for maltreatment</p> <p>Based on published literature (at the time) on strongest interactional predictors of abuse or neglect</p>
11. The Evaluation of Parental Fitness in Termination of Parental Rights Cases: A Functional-Contextual Perspective (Azar et al., 1998)	
<p><i>5 skill areas, 4 assessment domains</i></p>	<p><i>Limitations</i></p>

<p>The authors describe a ‘functional-contextual’ approach, whereby the focus is on the role of the parent within the child’s individual needs, and the functioning impact of any deficits.</p> <p><i>Skill area 1 - parenting skills:</i> e.g. parenting skills (such as problem-solving, physical care, warmth and sensitivity)</p> <p><i>Skill area 2 - social and cognitive skills:</i> e.g. the ability to take perspectives, appropriate developmental expectations, sense of efficacy and appropriate socialisation</p> <p><i>Skill area 3 - self-control:</i> e.g. impulse inhibitory control, ability to take assertive stance</p> <p><i>Skill area 4 - stress management:</i> e.g. self-care, recreation, social support, ability to budget</p> <p><i>Skill area 5 - social skills:</i> e.g. interpersonal skills</p> <p><i>Domain 1 – parent information:</i> personal history and background including substance use, psychiatric, criminal and educational history; family and child protection history; current parental, social and psychological functioning</p> <p><i>Domain 2 – child information:</i> developmental history and current needs; views of parent; impact of abuse or neglect; child reaction to parent visits</p> <p><i>Domain 3 – parent-child relationship:</i> nature of bond including both parties’ views of relationship; direct observations; ‘fit’; prediction of risk</p> <p><i>Domain 4 – systemic information:</i> engagement and progress in treatment; consistency with contact; observations of contact supervisors; engagement with other professionals</p>	<p>Not ecological (although context is acknowledged)</p> <p>Does not provide a model or process for synthesising information and making decisions about parenting capacity</p> <p>Some areas of redundancy</p> <p><i>Strengths</i></p> <p>Suggests multiple interpretations of data, along with the strengths and weaknesses of each interpretation</p> <p>Includes descriptors of observable behaviours suggestive of increased risk for maltreatment</p> <p>Provides evidence-based caution and recommendations regarding attachment-based assessment</p> <p>Focus on minimally-sufficient and individualised model</p>
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Appendix C

Application to the University of Canterbury Human Ethics Committee

Human Ethics Application Coversheet – Student

Please remember that your audience for this application form, as well as all forms for participants, will include community members and scholars from outside your discipline and therefore must be written in everyday language.

This form should be completed after reading the *Human Ethics Policy* issued by the Human Ethics Committee available at <http://www.canterbury.ac.nz/humanethics>

Will another ethics committee review this application?

This research project will need to be approved by the Ministry of Social Development Research Access Committee. In order to gain this approval, the project needs to be first approved by an accredited human ethics committee (see Application Guidelines, Ministry of Social Development).

- If a New Zealand Health and Disability Ethics Committee (HDEC) is reviewing your project, please send your HDEC application to us with this coversheet, and then the approval. You do not need to fill out the full University of Canterbury application form.
- If you have ethics approval from another institutional ethics committee (eg another New Zealand or Overseas University ethics committee) and you will conduct your research in the country of that ethics committee, please send this coversheet only with that application and the later approval letter, and an explanatory email. You do not, initially, need to fill out the full University of Canterbury application form.

Please ***Bold*** your answers

Project Title: *Families at risk: mechanisms for change*

Status of Research: PhD

Applicant

Name: **Sarah Whitcombe-Dobbs**

University Programme/ Department: **PhD (PSYC)/School of Health Sciences**

Applicant's Email: **sarah.whitcombe-dobbs@pg.canterbury.ac.nz**

Primary Telephone No: **021 0298 1751**

Primary Supervisor Title, given name and family name

Name: **Associate Professor Dr. Michael Tarren-Sweeney**

University Programme/ Department: **Child & Family Psychology Programme, School of Health Sciences**

Supervisor's Email: **michael.tarren-sweeney@canterbury.ac.nz**

Primary Telephone No: **03 364 2987 ext 7196**

Other Supervisors Dr. Mike Robb

Researcher's Signature


I *Sarah Whitcombe-Dobbs* have considered, the various ethical issues involved in this research, I have discussed this proposal with my supervisor(s), and I will conduct this research within the bounds of any approval given by the Human Ethics Committee of the University of Canterbury.

Signed: _____ Dated: _____

Is the approval of this application a necessary pre-requisite for the Dean of Postgraduate Studies to formally accept your PhD proposal? [YES/NO]

Senior Supervisor's Signature

As the primary supervisor of *[insert applicant's name]* research project I, *[insert Supervisor's name]* consider that the design and documentation are of a standard appropriate for a research project carried out in the name of the University of Canterbury.

Signed:  _____

Dated: 10/3/2016

Low Risk processes (to be completed by the primary supervisor)

The low risk process for students differs from a full application only in that it is examined solely by the Chair of the Human Ethics Committee. As a result it may be possible to reply to the applicant in 7 days. It is to be signed only by supervisor(s).

Please explain why the research is low risk research low risk, noting the information overleaf
If this section is left blank, the application will be considered a full application.

Signed (Senior/Primary Supervisor only) _____ Dated: _____

Submission instructions.

Please submit ONE electronic file containing all the necessary documents in a PDF format and ONE fully signed hard copy. Exceptions may be made, but must be discussed first with the HEC Secretary. Processing of HEC applications is unable to begin until a hard copy of the application has been received by the Ethics Office.

Electronic copies should be emailed to human-ethics@canterbury.ac.nz. Hard copies should be sent to the Secretary, Human Ethics Committee (Level 5, Matariki South).

Low Risk application information:

Research may be considered low risk when it arises from

- a Masters or PhD theses where the projects do not raise any issue of deception, threat, invasion of privacy, mental, physical or cultural risk or stress, and do not involve gathering personal information of a sensitive nature about or from individuals.
 - b Masters or PhD level supervised projects undertaken as part of specific course requirements where the projects do not raise any issue of deception, threat, invasion of privacy, mental, physical or cultural risk or stress, and do not involve gathering personal information of sensitive nature about or from individuals.
 - c Undergraduate and Honours class research projects which do not raise any issue of deception, threat, invasion of privacy, mental, physical or cultural risk or stress, and do not involve gathering personal information of sensitive nature about or from individuals, but do not have blanket approval as specified in Section 4 of the Principles and Guidelines.
3. No research can be counted as low risk if it involves:
- (i) invasive physical procedures or potential for physical harm
 - (ii) procedures which might cause mental/emotional stress or distress, moral or cultural offence
 - (iii) personal or sensitive issues
 - (iv) vulnerable groups
 - (v) Tangata Whenua (if in doubt please see the comments under question 12 on the application form)
 - (vi) cross cultural research
 - (vii) investigation of illegal behaviour(s)
 - (viii) invasion of privacy
 - (ix) collection of information that might be disadvantageous to the participant
 - (x) use of information already collected that is not in the public arena which might be disadvantageous to the participant
 - (xi) use of information already collected which was collected under agreement of confidentiality
 - (xii) participants who are unable to give informed consent
 - (xiii) conflict of interest e.g. the researcher is also the lecturer, teacher, treatment-provider, colleague or employer of the research participants, or there is any other power relationship between the researcher and the research participants.
 - (xiv) deception
 - (xv) audio or visual recording without consent
 - (xvi) withholding benefits from “control” groups
 - (xvii) inducements
 - (xviii) risks to the researcher

This list is not definitive but is intended to sensitise the researcher to the types of issues to be

considered. Low risk research would involve the same risk as might be encountered in normal daily life.

Description of the Project

1. What does the project seek to do?

This project focuses on parents with children in their care where there have been substantiated findings of child abuse. It is looking to illuminate psychological factors related to subsequent parenting behavior. Ultimately, this study will help to reduce the harm experienced by children,

improve and shorten the decision-making process around which of those children need to be uplifted into state care, and highlight areas that can be targeted through intervention.

It should be noted that this research project can only be carried out with the active facilitation of Child, Youth and Family and the Ministry of Social Development.

2. What is the research question or hypothesis of this project?

Among a group of high risk parents, what are the harmful parenting characteristics that predict notifications of abuse that occur following a parenting intervention?

3. Describe how this project arose

The researcher is a Child and Family Psychologist with a background working in CYF, mental health (non-professionally) and the Ministry of Education (professionally). Working with children who have been abused and/or neglected is severe and complex work, and children are often receiving intensive services over many years – for some, most of their childhoods. However, many of the families of these children never receive intensive and evidence-based intervention, and incidents of abuse continue throughout their children’s lives – some children are uplifted into state care, and some are not. A brief look at the numbers on this issue from CYF is revealing: at any given time, approximately 5,000 children are in state care. However, there were 16, 289 children in 2014 who had substantiated findings of child abuse (CYF, 2014). The majority of those children will never come into permanent state care and will remain with their families of origin, but the outcomes associated with exposure to neglect and abuse are distressing and costly to both the individuals concerned and those around them throughout their adult lives.

4. How will you go about answering the research question?

An in-depth psychological assessment will be carried out with a large sample of parents referred by CYF. After six months have elapsed and the parents have received a parenting intervention, outcome measures will be taken that are indicative of the extent to which that parent has changed their behaviour. Outcome measures include whether the child remains in the care of their family of origin, and the number of notifications made to CYF during the elapsed period. Follow up outcome data will be gathered at two years and up to five years post-assessment. Generalised linear regression models will be used to inform an hypothesis about causal mechanisms pertinent to a parent’s capacity to change over a 6-month period. The sample size was decided because it is small enough to be realistic in the time-frame needed, and large enough to provide statistically significant results.

Information about the Participants

5. Who are the participants and why have they been chosen to be asked to participate?

The participants are the population for whom the intervention is targeted. If other participants (even similar participants) were used, this would undermine the validity of the research findings. This relates to the unique presentation, in terms of severity and complexity, of this parent population. Many studies have trialled interventions with people who are presenting with factors associated with higher risk for abuse or neglect, and published their findings as interventions for maltreating parents. However, very few studies have been able to adequately recruit, retain and gather data on parents who have ongoing monitoring by child protection services. The studies that

have been completed are extremely valuable resources for governments and practitioners working with these populations.

6. How many participants will be involved (of each category where relevant)?

I envisage recruiting 40-60 families, but the exact number will be determined by power calculations based on figures from an initial pilot sample.

7. What selection criteria and/or exclusion criteria will you use?

Participants will be selected into the study if there have been substantiated findings of child abuse and they have not yet begun intervention, and they retain custody of their child/ren at the time of the referral (i.e. around the point of their first Family Group Conference). Parents will be screened for a substance use disorder, and those scoring within the range indicating a “severe” disorder will be put into a secondary study. Those with mild-moderate substance use will be included in the main study. The rationale for excluding those with a severe substance use disorder is that the disorder can mask parenting behaviour and make the identification of psychological constructs very difficult, thus confounding the results. Classification of substance disorder will be based on psychometric data (i.e. a score of ≥ 16 on the Alcohol Use Disorders Identification Test (AUDIT) or a score of ≥ 6 on the Drug Abuse Screening Test (DAST-10)).

However, the participation of parents with a severe substance use disorder will provide valuable data on that population. For this reason, parents in the “secondary” study will participate in the same way as those in the “main” study, but the initial assessment with them will be less extensive.

8. Describe how potential participants will be identified and recruited?

CYF will be collaborating with the researcher in order to facilitate recruitment. The proposed plan is that CYF allocate one staff member to identify and contact all potential participants. Those families will be asked (verbally) for permission for their contact details to be shared with the researcher. The researcher will then contact them directly, and ask to make a time to go through the information and consent forms in person.

A back-up proposal (if the first proposal is not agreed to by CYF) involves a list being made at the National Office level of eligible families. That list is then sent to the appropriate site manager and supervisors at those sites will contact the families directly and ask their permission for their contact details to be shared with the researcher.

9. Does the project involve recruitment through advertising? **NO**

10. How much time are participants asked to contribute to the research?

It is expected that the assessment project will take up to 4 hours face-to-face time with the researcher.

11. Is any form of inducement to be offered? **NO**

However, parents may feel some pressure to accede to participation. Specifically, parents may feel that they need to agree to assessment in order to retain the care of their children. However, parents will be able to opt into or decline participation without adverse consequences to their

parenting rights either way. Clarification around parents not being offered inducement will be discussed with CYF staff regularly throughout the project.

It is planned beyond contacting eligible participants in the first instance, CYF will not be informed of whether or not families continue as participants in the study. This can be done by allowing the researcher independent access to the CYF database to gather the data for each family, rather than requesting this from the social worker themselves. This approach has been discussed with Paul Nixon as a way to reduce any coercion perceived.

12. How will the participants be treated?

Participants will be fully informed about the process throughout the assessment, with the right to withdraw consent at any time. However, they will be asked at the initial appointment to disclose their reasons for withdrawal if they are willing to do so – this would be helpful information in terms of looking at attrition in this population.

Participants will be given the option to have clinic-based or home-based sessions, and they will meet with one or two researchers/practitioners at a time. They will be treated with dignity and respect. Sessions will last approximately one hour, and will be timed as far as possible to be convenient for the participants.

The researcher is experienced in working with people who are distressed and/or have mental health problems affecting their wellbeing. Any difficulties will be identified, and participants will be supported to access appropriate supports.

Other parties with an interest in the research

13. Does the project require permission of an organisation, other people, to access participants or information? YES

CYF will be asked to support access to participants. This will be obtained by meeting with CYF management, to create an agreement about processes for referring to the intervention. It will be emphasised in writing and verbally that participants have the right to decline participation in the research and intervention.

There are potential conflicts of interest with this arrangement:

1. CYF may want to own the rights to the intellectual property within the assessment protocol. This will not be agreed to as it is independent research.
2. Because CYF is a government agency, its objectives for success may differ from the University of Canterbury's objectives or the researcher's objectives.
3. The Ministry of Social Development may want to do a media release on the project, if it is in line with government policy at the time. However, CYF work under the Privacy Act and participants' privacy must be maintained at all times.

Some consultation has already occurred in a semi-formal manner with the Southern Regional Practice Advisor, Bronwyn Kay, advising of next steps and giving feedback on the proposal (22nd October 2015). She was supportive of the research.

Ongoing consultation regarding research design and real-world feasibility has been held with the current Regional Director for the Children's Teams, Peter Whitcombe. This role sits across four government ministries (Ministry of Justice, Ministry of Social Development, Ministry of Health and Ministry of Education) and the NGO sector.

A meeting has occurred with a frontline CYF social worker to ensure that proposed project fits with current practice and processes (December 2015).

The researcher and supervisor met with Paul Nixon (Chief Social Worker) in Wellington in January 2016. At this meeting he indicated that he would support this project through the research access committee and appreciated its value in adding to knowledge related to current practice in the field of child maltreatment.

14. Will the project require Maori consultation? YES

As per the Code of Ethics for registered psychologists, culturally responsive practices will be employed by researchers and practitioners throughout all stages of the project. This includes a commitment to the principles in te Tiriti o Waitangi, and further explanation of how this may be relevant to mental health treatment for Māori can be found here: (link goes to psychologists' board "Cultural Competencies" document)

http://www.psychologistsboard.org.nz/cms_show_download.php?id=211

This topic may be of particular interest to Māori because Māori children are disproportionately over-represented in the New Zealand/Aotearoa population of children in care. However, it is important to refrain from making any assumptions about the cultural status of the target population. There are some ethical issues regarding the use of psychometrics with Māori and effective engagement with whānau Māori, and these will be discussed within the literature review in the final write-up and managed throughout the project via cultural supervision.

The researcher has engaged with the Māori Consultation Panel, and recommendations arising from this process will be followed.

The researcher has completed Treaty of Waitangi training (2009; 2014 – intermediate) and has received cultural supervision regarding ongoing casework while working at the Ministry of Education, Special Education. The researcher has also had experience, prior to professional training, in working as a playgroup coordinator in a bicultural playgroup setting (Te Whare Roimata Community House – 2001-2002). Throughout her work, the researcher's clients have included whānau and tamariki Māori, alongside other ethnicities. However, it is acknowledged that ongoing consultation regarding cultural factors is necessary to ensure cultural responsiveness throughout this project, as well engaging with Māori researchers regarding analysis of Māori data.

A note on the use of psychometrics with Māori that have not been developed for or normed with a Māori population:

It is true that these questionnaires have not been normed on a Māori population. However, for the purposes of the project, participants will not be compared against a normative sample – this would not be useful for other reasons including the fact that the characteristics of the participants are different from those in a normative sample, meaning that direct comparison is

not valid. The scores from psychometric assessment will be used to link with the group's outcomes – providing valuable quantitative data on presentations, both Māori and non-Māori, within this group, which is a useful end in itself. Additionally, the study will show whether a specialised assessment of this sort that includes psychometrics, can be done with Māori in a valid way. Psychometric assessment can be a valuable research tool, and excluding Māori from the potential benefit of this research is (in my opinion) discriminatory and reduces the overall validity of the research. In terms of interpreting data from Māori participants, support from academics with expertise in Māori studies will be sought to ensure that theoretical interpretations of Māori experiences are culturally valid and reflect Māori interests and goals.

Having a different assessment protocol for Māori (or excluding Māori from the study) compromises the study to the point where it is not possible to be done. The question asked by the study is not whether or not the measures are “good” measures, but whether they are able to predict outcomes. The risk in using these measures applies to all participants – that the findings show no association to outcomes. However, the measures have been chosen based on a comprehensive review of the literature and the current best evidence available, in order to optimise the chances that they do function to identify which parents change in response to intervention.

Points raised by Ngāi Tahu Consultation and Engagement Group:

- A group has been identified consisting of Māori academics and practitioners with expertise in related fields. Before I begin gathering data, a meeting will be held to ensure cultural supports are in place. It is my expectation that should any member of that group be unhappy with my plan for cultural support, they would raise this with me and the consultation group.
- I will provide a written summary of each tool and describe where it may sit alongside (or in contrast to) cultural values. I will also provide a copy of the rationale for each tool in what it may contribute to the findings of the project.
- This is something that will be done after data has been gathered. It is my intention to analyse Māori data separately as well as together with the whole participant group to look for patterns and similarities. However, given the sensitive nature of the data, research expertise from those who conduct kaupapa Māori research will be invaluable.
- This point is well made, and again when analysing the data supervisory input will be sought to ensure that theoretical interpretations of Māori experiences are culturally valid and reflect Māori interests and goals.

15. Will the project require Community consultation? **NO**

16. Is the project funded externally? **NO**

17. Is the project commissioned by or carried out on behalf of an external organisation(s)? **NO**

18. Is the project to be part of the CEISMIC digital archive? **NO**

Data collection

19. Does the project involve a questionnaire? **YES: The project involves the use of psychometric assessment of the participants, most of which are in the form of questionnaires. The following will be used (these are appended), as well as the format for the semi-structured interviews:**

1. **Difficulties in Emotional Regulation Scale (DERS)**
2. **Parenting Sense of Competency Scale (PSOC)**

3. Alcohol Use Disorders Identification Test (AUDIT)
4. Drug Abuse Screening Test (DAST-10)
5. Depression Anxiety Stress Scale (DASS)
6. Working Model of the Child Interview (WMCI) (participants in the main study only)

(a) Explain how and why the questionnaire(s) will be anonymous or confidential: **The questionnaires will be confidential to the research team (which consists of the PhD candidate, her supervisors, a research assistant and potentially future students who are supervised by the PhD candidate and her supervisors), and this will be done by following normal secure data storage protocols developed by the New Zealand Psychologists' Board. Under these guidelines, the management of all personal information is covered in NZ by the Privacy Act 1993, and the Health Information Privacy Code 1994 (HIPC). A summary of the rules is below:**

- Information gathered will only cover that necessary for the purposes of the research project.
- Information will be gathered directly from the person concerned, and if a third party is asked for information on the person concerned this will be made clear.
- Participants will be made aware that information collection is taking place and the purposes of that collection.
- The information gathered will be guarded against loss or unauthorised access or use. Only those who have been given approval by the client may read or copy the information.
- Participants will have the right to request the information held about them.
- Participants will have the right to request correction to health information about them that they believe to be incorrect. If this contravenes the purposes of the study, a note will be placed on the file expressing the participants' views.
- Data will be stored for the length of time required by the Health (Retention of Health Information) Regulations 1996 – 10 years.
- Information will only be disclosed to others where the participant has given consent, except in cases where there are concerns about risk to the safety of the participant or anyone else, in which case confidentiality may be broken. This pertains to the Children, Young Persons and Their Families Act 1989, sections 15 and 16. If information is requested via subpoena, the participant's wishes will guide whether or not information is shared. If a judge issues a court order requesting that information, this will likely be provided to the court.

(b) Explain how the questionnaire will be distributed and collected.

The questionnaires will be administered in person, with the researcher alongside the participants as they are filled in. In some cases where participants indicate they are motivated to do so, questionnaires may be labelled confidential and left with them, then mailed directly to the researcher at the University of Canterbury address.

20. Does the project involve a structured or semi-structured interview? **YES**

The project involves gathering demographic data (the ethnicity question will use the same options as the census), as well as a comprehensive history. Information will be gathered regarding participants' education, current general health, history of abuse as a child, mental health history and current presentation, substance use history, conviction and incarceration history, current and historical family violence, current stress levels, financial situation, sleep patterns, feelings about and attitudes towards their child/ren, and extended family/whānau relationships and support levels. They will also be asked about their activities and interests. See appended information for further details.

21. Does the project involve an unstructured interview? **YES**

Topics covered include: feedback on the assessment and interview process, attitudes and beliefs about parenting and their relationship with their child in particular, changes, reasons for changes in behaviour, frustrations and goals.

22. Does the project involve focus groups? **NO**

23. Does the project involve recording of Audio, Video or Images? **YES**

Audio or video recording of the semi-structured interview (the "Working Model of the Child Interview") will occur as part of the assessment process (Study 1) to enable accurate coding of parent responses. The interview requires transcription to code, and when these transcriptions are completed the videos will be destroyed and the participant informed that this has occurred.

24. Will participants will be given the opportunity to check the transcript and/or notes of their interview/focus group? **YES**

Informed and Voluntary Consent

Please note: The HEC recommends that participants receive an information sheet, which they must be able to retain, unless there are good reasons for not adopting such a procedure.

The information sheet(s) and the consent form(s) should be separate. Projects which **only** involve an anonymous questionnaire may not necessarily require a separate information sheet, provided that the questionnaire includes your name and contact number as well as the other points contained in the information and consent templates available on the HEC website. *Please note: so that participants can retain a copy of the information sheets, the information sheet(s) and the consent form(s) should be separate.*

25. By whom and how will information be given to potential participants?

Participants will be informed of the research project by a CYF staff member, who will make it clear that consent is voluntary. The information sheet (see attached) clarifies that they are able to withdraw consent at any time without consequences. They will also be asked, during the informed consent process, to let the researcher know their reason for withdrawing their consent as this might help to improve the project for other participants. Once participants have given verbal consent to their details being shared with the researcher, written consent will be sought at the initial meeting with the researcher (see attached consent form).

26. Are all participants competent to give consent on their own behalf? YES

If no, please explain,

- (a) why they are not competent to give informed consent on their behalf?
- (b) how consent will be obtained in the absence of that competency?
- (c) if applicable, how will assent to participate be gained?

Privacy and Confidentiality

27. Will information pertaining to or about the participants be obtained from any source other than the participant? YES

- (a) the identity of the third party or parties.

Child, Youth and Family – Ministry of Social Development

- (b) why such information is needed.

Triangulating data increases the validity of the project. It is likely that the target population will not disclose all the desired information due to a variety of reasons, including forgetting. CYF social workers will summarise the notification history and data they hold on the participants' backgrounds and behaviour as part of the referral process, once (oral) consent has been obtained from the participant. However, further and follow up data will be gathered by the researcher to ensure that CYF are blind to which parents choose to continue to participate in the study.

It is essential to the validity and reliability of this research to gather independent data from CYF, including pre-intervention, post-intervention and for a follow-up period. If successful, this information will be a rich data source for future research in this field.

- (c) how will you obtain consent from the participant and the third party(ies) to gather that data. Please ensure the information sheet is very clear about any data gathered about participants from third party participants, and how you intend to gain permission to see the data.

For the initial referral process, oral consent will be obtained from the participant by the CYF staff member. During the initial meeting, the participant will have explained to them the nature and extent of the information gathered by the researcher about them. If they wish to rescind their consent at that point, then the referral information will be destroyed.

- (d) the processes you will use to obtain that data.

This will be provided by CYF social workers via a written referral form (attached) and possibly follow-up phone calls for clarification purposes. Post-intervention and follow-up data will be gathered from the database at CYF.

28. Is information that identifies participants to be given to any person outside the research team, or if identification of or attribution of comments by participants is sought, please explain how and why.
NO.

29. Please explain how confidentiality of the participants' identities will be maintained in the treatment and use of the data.

Data will be stored securely in files. Participants will be assigned a code number, and this will be used on all stored data about that participant including all questionnaires, psychometrics and transcripts. Working files will contain real names and contact details as this is needed for the duration of contact with participants. Working files will only ever be with the researcher (i.e. on their person), or in locked filing cabinets on the University of Canterbury grounds.

30. Is an institution (eg, school, business, etc) to which participants belong to be named or be able to be identified in the publication or presentation of this project? **NO**
31. Where will the project be conducted? It is recommended that interviews be conducted in public spaces, not in private homes.

Participants will be offered the choice to be interviewed in a clinic setting or in their home. The reason for this is that many parents within the population do not reliably attend appointments for a variety of reasons including cost of transport and lack of childcare. In the researcher's experience in working with parents within the target population, most parents say that it is more convenient for them to meet in their homes. The literature shows that most of the interventions for parents within the target population are conducted in home settings, as that leads to the lowest rate of attrition from the intervention. The potential risks that home-visiting poses to the researcher and the participant will be addressed in the next section.

Risk

If the answer to any of the following questions is "Yes", please indicate briefly the nature of the risk and what actions you could take, or support mechanisms you could rely on, if a participant should become injured, distressed or offended while taking part in this project. In order to maintain a distinction between the researcher and other roles, support should not be undertaken by researcher. At the very least, a list of support services should be included in the information sheet and also participants made aware of the possibility in the information sheet.

32. Is there any risk to physical well-being? **YES please see attached risk management plan.**
33. Could participation involve mental stress or emotional distress? **YES please see attached risk management plan.**

The researcher, and others implementing the intervention, are practitioners who are experienced in working with families presenting with complex and challenging problems. If, at any point in the project, there is a risk to the researcher, the participant or a child, then one of the following will be done:

- **Calling 111 for police**
- **Notifying CYF of potential or actual child abuse 0508 FAMILY**
- **Calling the Crisis Resolution Service for psychiatric emergencies 0800 920 092**
- **Calling a manager or PhD supervisor for support and advice**

34. Is there a possibility of causing moral or cultural offence, inadvertently or otherwise? **YES**

Participants are likely to come from a range of cultures and backgrounds, with a variety of family norms and values that may be different from the researcher's. The researcher has training in implementing the Treaty of Waitangi principles in a practice setting. In addition, cultural responsiveness is part of the kaupapa of practising psychologists as well as social work and counsellor training programmes. If offense is caused, then this will be discussed with the participant and a resolution negotiated that is led by the offended party. A complaints process for expressing dissatisfaction with the project is within the consent and information sheets.

35. Is deception involved at any stage of the project? **NO**

Data Storage and Future use

36. Please provide details of how the data will be securely stored, and how you will separate identifying and non-identifying data. ie, What steps will be taken to ensure that information given by participants is safe and protected? All storage facilities including electronic equipment should be in rooms that can be locked. All data should be stored in password-protected files and, where on computers, the computers should be password protected. Data should be backed up or stored on the University servers. If you intend to store the data in cloud services please provide a justification and documentary proof that the data will be secure (eg, relevant sections of the terms of service of the provider).

All storage facilities, including computers, will be in rooms that can be locked. All data will be password protected in files on the University of Canterbury servers. Participants will be assigned a code number, and this will be used on all stored data about that participant including all questionnaires, psychometrics and transcripts. Working files will contain real names and contact details as this is needed for the duration of contact with participants. Working files will only ever be with the researcher (i.e. on their person), in a locked bag in a locked car, or in locked filing cabinets on the University of Canterbury grounds.

37. Who, apart from the researcher and their supervisor (where applicable) will have authorised access to the data? Research Assistants and transcribers need their own confidentiality forms and their participation needs to be made known to participants.

38. What will happen to the raw data at the end of the project?

Data must be kept for 10 years as per the University of Canterbury and Psychologists' Board guidelines. Following this, it will be destroyed.

39. What plans do you have for the publication of the data? Please note, and include in your information sheets, that Masters thesis and PhDs are public documents available via the UC library database. Also, participants should be offered summary of results.

It is intended that data will be written up and published, and disseminated via other methods such as conference presentations. Participant confidentiality will be maintained, other than that they came from Christchurch, New Zealand.

40. Please describe plans for future use of the data beyond those already described above.

As described above, it is intended that this project forms the basis for ongoing research into the field of child maltreatment. Therefore data gathered as part of this project will inform future research questions and also form part of any long-term follow-up studies that may eventuate if the project is successfully implemented and funded.

Appendix D

Response from the Ngāi Tahu Consultation and Engagement Group

Ngāi Tahu Consultation and Engagement Group

February 11th, 2015



Tēnā koe, Sarah

Re: Families at risk: mechanisms for change

This letter is written on behalf of the Ngāi Tahu Consultation and Engagement Group. We have read and considered your proposal and are in agreement that this is a very worthwhile and interesting project with potential benefits for Māori communities. To ensure that the project is culturally responsive and informed we recommend that you:

- have in place ongoing cultural supervision, particularly with regard to interviewing Māori participants.
- explain the choice of research tools and methods from a cultural perspective.
- seek support and guidance from Annabel Ahuriri-Driscoll, Angus Macfarlane, and Jim Anglem regarding your approach to analysing data from Māori participants.
- ensure that the theoretical orientation of the project includes a socio-cultural perspective that will help you to make sense of the complexity of Māori experiences, and ways of being and knowing.

Thank you for engaging with the Māori consultation process. This will strengthen your research proposal and increase the likelihood that the outcomes of your research will be of benefit to Māori whānau. We wish you all the best with your current project and look forward to hearing about future research plans.

The Ngāi Tahu Consultation and Engagement Group would appreciate a summary of your findings on completion of the current project. Please feel free to contact me if you have any questions.

Nāku noa, nā

A handwritten signature in cursive script that reads 'Tracy Rohan'.

Dr Tracy Rohan

Research Consultant Māori

Research and Innovation Room 244, Level 2, Psychology Building

ext 45520 Email: tracy.rohan@canterbury.ac.nz

Office Hours: Wednesdays 12.30- 5.00 pm, Thursdays and Fridays 8.00am to 4.30 pm

Appendix E

UC Human Ethics Committee Letters of Approval



HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 364 2987, Extn 45588
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2016/14

12 September 2016

Sarah Whitcombe-Dobbs
School of Health Sciences
UNIVERSITY OF CANTERBURY

Dear Sarah

The Human Ethics Committee advises that your research proposal "Families at Risk: Mechanisms for Change" has been considered and approved, **subject to the following:**

Approval is granted on the condition that approval is also granted for the research by CYF, or subsequent future entity.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 30th August 2016.

Best wishes for your project.

Yours sincerely

pp. R. Robinson

Kelly Dombroski
Deputy Chair
University of Canterbury Human Ethics Committee



HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 369 4588, Extn 94588
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2016/14 Amendment 1

20 December 2016

Sarah Whitcombe-Dobbs
School of Health Sciences
UNIVERSITY OF CANTERBURY

Dear Sarah

Thank you for your request for an amendment to your research proposal "Families at Risk: Mechanisms for Change" as outlined in your email dated 13th December 2016.

I am pleased to advise that this request has been considered and approved by the Human Ethics Committee.

Yours sincerely

pp. R. Robinson

Dr Kelly Dombroski
Deputy Chair, Human Ethics Committee

HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 369 4588, Extn 94588
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2016/14 Amendment 2

9 May 2017

Sarah Whitcombe-Dobbs
School of Health Sciences
UNIVERSITY OF CANTERBURY

Dear Sarah

Thank you for your request for an amendment to your research proposal "Families at Risk: Mechanisms for Change" as outlined in your email dated 1st May 2017.

I am pleased to advise that this request has been considered and approved by the Human Ethics Committee.

Yours sincerely

pp. R. Robinson

Associate Professor Jane Maidment
Chair, Human Ethics Committee

HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson
Telephone: +64 03 369 4588, Extn 94588
Email: human-ethics@canterbury.ac.nz

Ref: HEC 2016/14 Amendment 3

8 May 2017

Sarah Whitcombe-Dobbs
School of Health Sciences
UNIVERSITY OF CANTERBURY

Dear Sarah

Thank you for your request for an amendment to your research proposal "Families at Risk: Mechanisms for Change" as outlined in your email dated 29th April 2017.

I am pleased to advise that this request has been considered and approved by the Human Ethics Committee.

Yours sincerely

pp. R. Robinson

Associate Professor Jane Maidment
Chair, Human Ethics Committee

Appendix F

Field Activity Risk Management Plan

School of Health Sciences Field Activity Plan (if field work is based in a Home Setting)

To be completed and provided to the senior supervisor before the field work commences.

College of Education, Health and Human Development

PhD Candidate			
Full Name	Sarah Anne Whitcombe-Dobbs		
Work Area			
Email	Sarah.whitcombe-dobbs@pg.canterbury.ac.nz	Phone	021 0298 1751

Field Advisor (if required)			
Full Name	Dr. Michael Tarren-Sweeney		
Work Area			
Email		Phone	

Field Activity Details				
Paper/Course	PSYC790			
Purpose of Field Activity	Home visit family			
Start Date				
Return from activity method of notification (who you will notify and how you will notify them)				
Provide brief description of the Activity				
Emergency Contacts				
Emergency Number	111			
UC Emergency Contact		Senior Supervisor		
		UC School of Health Sciences		
	Phone			

UC Health and Safety Manager	Name	
	Mobile	
	Office Phone	
UC Health and Safety Advisor	Name	Maura Minnock
	Mobile	027 742 8689
	Office Phone	DDI 03 364 2630 Internal Extension 6630
Emergency Procedures		
<p><i>What could go wrong despite efforts to control risks? How will you manage the emergency? Consider:</i></p> <ul style="list-style-type: none"> • <i>prevention of further harm or injury</i> • <i>communication</i> • <i>access to emergency services</i> 		
<p>Please refer to the Risk Matrix below.</p>		

Risk Rating Matrix

Risk Matrix

<div>Consequence</div> <div>Likelihood</div>	Minor (1)	Moderate (2) (first aid only)	Severe (3) (serious harm)	Major (4) (permanent disabling injury)	Catastrophic (5) (Loss of life, > \$1m costs)
Almost never/rare (1)	Low (1)	Low (2)	Low (3)	Low (4)	Medium (5)
Unlikely (2)	Low (2)	Low (4)	Medium (6)	Medium (8)	High (10)
Possible (3)	Low (3)	Medium (6)	Medium (9)	High (12)	High (15)
Likely (4)	Low (4)	Medium (8)	High (12)	High (16)	Critical (20)
Almost certain (5)	Medium (5)	High (10)	High (15)	Critical (20)	Critical (25)

Significant: can cause serious harm.

Risk: the chance of something happening that will impact on your field activity.

Residual Risk: The level of risk remaining after all control measures have been implemented.

Hazard Risk Assessment and Management – for home visits

Hazard Risk Assessment and Management								
Hazard Description	Significant Yes or no	Hazardous Event (i.e. what may occur to lead the hazard to cause harm)	Like - lihood (L value)	Con - se - quence (C value)	Ris k Rating L x C	Hazard Action/Control Plan Update controls as required	Res idua l Ris k Rating	Eliminat ed, Isol ated or minim ised
Getting lost on the way to the property and being in an unfamiliar area	Y	Ending up alone in an unsafe area and being a victim of crime	3	3	9	Get clear Directions Plan and use the safest and most direct route Carry a map in the car, use a GPS or a GPS phone app Let the people you are visiting and your Field Advisor know you are coming	6	Minim ised
Travelling in a Car/transport	Y	Possibility of Accident or car breakdown	3	5	15	Ensure the car has sufficient petrol for return trip Be aware of road conditions – inclement weather situations, particularly in rural areas Ensure car is well maintained	10	Minim ised
Animals on the property	Y	Dog or any animal that could present a danger to student safety.	3	3	9	If animals/dogs are unrestrained in your parking area, do not get out of the car. Honk your horn and wait for someone to come out. Insist that the dog or other animal be isolated so that no attack can take place.	2	Isolate d
Visiting a client in their private home	Y	Risk of attack by client or persons at the address being visited	3	3	9	Do not visit if the location is changed by the family at the last minute On arrival at your destination always be alert regarding your surroundings. Make a visual check of the property, surrounding area, checking for ease of access, visibility to passing traffic/public and availability of a quick exit route.	6	Minim ised

						<p>If an area looks unsafe when you arrive, drive away.</p> <p>Be organised. Have materials ready beside you in your car. Plan your activities so that you do not spend much time taking things out of your car.</p> <p>Park car on road side and avoid parking where you may be blocked in</p> <p>Carry a mobile phone, leave it switched on at all times and on emergency speed dial</p> <p>If you enter the home, follow the client into the home, don't walk in first</p> <p>Only enter the house when invited and an adult is present</p> <p>If any persons at the location you are visiting have a manner that makes you feel uneasy or uncomfortable, don't proceed. Make an excuse and leave immediately.</p> <p>Choose a chair close to the door and easy to get out of.</p> <p>If you begin to feel unsafe, leave and schedule another visit.</p> <p>If you enter a home where any person present appears to be under the influence of alcohol, drugs or solvents, or is in any way threatening, leave immediately.</p> <p>If in doubt about your safety at any stage leave immediately and reschedule the visit for a later time.</p> <p>Trust your instincts.</p> <p>After a home visit where your safety has been threatened report the incident immediately to your Field Advisor</p>		
--	--	--	--	--	--	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

						Report any concerns to your Field Advisor.		
Visiting a client in their home unaccompanied	Y	Being detained against their will and unable to leave due to threatening situation	3	3	9	Text or phone the Field Advisor on arrival at the home visit.	6	Minimised
						Text or phone the Field Advisor on departure from the home visit. When Field Advisor fails to receive departure text from student emergency follow up will be made		
Entering a non-smoke free environment	Y	Secondary smoke inhalation Aggravation of medical conditions ie could cause an asthma attack	5	3	15	Ask Clients to kindly refrain from smoking in the room that the visit is taking place	3	Eliminated
						Leave the premises if residual smoke becomes an issue		

Use this form to assess hazards associated with the field activity and record controls. (Additional sheets may be needed for activities with multiple hazards).

Please email the completed form to the **School of Health Sciences Administrator**

bridget.ginley@canterbury.ac.nz

Appendix G

Letter of Approval Oranga Tamariki



7 August 2017

Sarah Whitcombe-Dobbs
Child and Family Psychologist/PhD student
Room 108, Waimairi Building
University of Canterbury

Dear Sarah Whitcombe-Dobbs

Confirmation of support for PhD Research

I am writing to confirm that The Ministry for Vulnerable Children, Oranga Tamariki is happy to support your PhD research as discussed on 4th May.

As discussed once consent has been obtained from participants in your study we will work with you to provide you access to administrative data relating to those individuals, ensuring that this private information is protected and the identities of others is protected.

We look forward to working with you to support your research.

Kind regards,

Debra Small
Workstream Lead, Data and Evidence

Appendix H

Letter of Approval HDEC



Health and Disability Ethics Committees
Ministry of Health
133 Molesworth Street
PO Box 5013
Wellington
6011

0800 4 Ethics
hdec@moh.govt.nz

09 March 2018

Ms Sarah Whitcombe-Dobbs
41 Stillwater Ave
Burwood
02102981751
Christchurch 8083

Dear Ms Whitcombe-Dobbs

Re:	Ethics ref:	18/STH/13
	Study title:	Families at Risk: Mechanisms for Change

I am pleased to advise that this application has been approved by the Southern Health and Disability Ethics Committee. This decision was made through the HDEC-Full Review pathway.

Summary of ethical issues (resolved)

The main ethical issues considered by the Committee and addressed by the Researcher are as follows.

- Provisional approval was granted and in order to give full approval, we requested a complete re-write of the Participant Information Sheet and Consent Form using the HDEC template. This has been done and the researcher has included all of our comments and given clear explanations of the study. She has also agreed to follow up participants with a phone call after the interviews.

Conditions of HDEC approval

HDEC approval for this study is subject to the following conditions being met prior to the commencement of the study in New Zealand. It is your responsibility, and that of the study's sponsor, to ensure that these conditions are met. No further review by the Southern Health and Disability Ethics Committee is required.

Standard conditions:

1. Before the study commences at *any* locality in New Zealand, all relevant regulatory approvals must be obtained.
2. Before the study commences at a *given* locality in New Zealand, it must be authorised by that locality in Online Forms. Locality authorisation confirms that the locality is suitable for the safe and effective conduct of the study, and that local research governance issues have been addressed.

After HDEC review

Please refer to the *Standard Operating Procedures for Health and Disability Ethics Committees* (available on www.ethics.health.govt.nz) for HDEC requirements relating to amendments and other post-approval processes.

Your next progress report is due by **08 March 2019**

Participant access to ACC

The Southern Health and Disability Ethics Committee is satisfied that your study is not a clinical trial that is to be conducted principally for the benefit of the manufacturer or distributor of the medicine or item being trialled. Participants injured as a result of treatment received as part of your study may therefore be eligible for publicly-funded compensation through the Accident Compensation Corporation (ACC).

Please don't hesitate to contact the HDEC secretariat for further information. We wish you all the best for your study.

Yours sincerely,

A handwritten signature in black ink, appearing to read 'Raewyn Idoine', with a horizontal line underneath.

Ms Raewyn Idoine
Chairperson
Southern Health and Disability Ethics Committee

Encl: appendix A: documents submitted
 appendix B: statement of compliance and list of members

Appendix A
Documents submitted

<i>Document</i>	<i>Version</i>	<i>Date</i>
Investigator's Brochure: Given to parents when first approached	1	11 December 2017
Approval letter from MVCOT	1	11 December 2017
PIS/CF: Information and consent forms	1	11 December 2017
UC Human ethics committee approval letter	1	11 December 2017
Protocol: Description of study procedures with participants	1	11 December 2017
Survey/questionnaire: copies of questionnaires	1	11 December 2017
Māori consultation evidence	1	11 December 2017
Covering Letter: Letter giving context to application	1	11 December 2017
CDHB Māori consultation review	1	11 December 2017
CV for CI: CV for lead researcher	1	11 December 2017
Evidence of CI indemnity	1	11 December 2017
Confidentiality form for collaborators	1	11 December 2017
Evidence of scientific review: Letter confirming that project has been independently reviewed by UC	1	11 December 2017
Protocol: Extended study protocol as requested by letter from HDEC (Fox Swindells)	1.1	08 January 2018
Evidence of scientific review: Letter providing further information and context regarding the peer review of the project	1.1	09 January 2018
Evidence of scientific review: Doctoral confirmation report submitted as evidence of peer review - see cover letter that accompanies this document	1.2	09 January 2018
Application		
PIS/CF: Participant information sheet and consent forms, altered per HDEC feedback on the 18.2.18	1.1	22 February 2018
Response to Request for Further Information		
Covering Letter: Reason for no tracking on latest version of PIS received_Feb2018.pdf		27 February 2018

Appendix B

Statement of compliance and list of members

Statement of compliance

The Southern Health and Disability Ethics Committee:

- is constituted in accordance with its Terms of Reference
- operates in accordance with the *Standard Operating Procedures for Health and Disability Ethics Committees*, and with the principles of international good clinical practice (GCP)
- is approved by the Health Research Council of New Zealand's Ethics Committee for the purposes of section 25(1)(c) of the Health Research Council Act 1990
- is registered (number 00008713) with the US Department of Health and Human Services' Office for Human Research Protection (OHRP).

List of members

<i>Name</i>	<i>Category</i>	<i>Appointed</i>	<i>Term Expires</i>
Ms Raewyn Idoine	Lay (consumer/community perspectives)	27/10/2015	27/10/2018
Dr Sarah Gunningham	Non-lay (intervention studies)	27/10/2015	27/10/2018
Assoc Prof Mira Harrison-Woolrych	Non-lay (intervention studies)	27/10/2015	27/10/2018
Dr Fiona McCrimmon	Lay (the law)	27/10/2015	27/10/2018
Dr Anna Paris	Lay (other)	24/08/2017	24/08/2020
Dr Nicola Swain	Non-lay (observational studies)	27/10/2015	27/10/2018
Dr Devonie Waaka	Non-lay (intervention studies)	13/05/2016	13/05/2019

Unless members resign, vacate or are removed from their office, every member of HDEC shall continue in office until their successor comes into office (HDEC Terms of Reference)

<http://www.ethics.health.govt.nz>

Appendix I

Letter of Approval Te Komiti Whakarite



3rd October 2017

Sarah Whitcombe-Dobbs
School of Health Sciences
University of Canterbury

RE: Families at Risk: Mechanisms for Change

Tēna koe Sarah,

Ka nui te mihi tēnei ki a koe me tou roopu o nga Kairapūkōrero ki te hapai o te kaupapa whakahirahira mou, mōku mo tātou katoa. Ko Rapunga Korero te mea nui. No reira tēnā koe me te roopu o nga Kairangahau, tēna koutou katoa.

Thank you for submitting the above research proposal to Te Komiti Whakarite, the Canterbury DHB Māori Health Research committee for Māori consultation.

When providing Māori consultation for multi-site applications we are satisfied any concerns we may have, have been covered by the lead site, Dr Tracy Rohan, Research Consultant Māori, Ngai Tahu Consultation and Engagement Group, University of Canterbury.

Your proposal is well considered and clear about how the researcher will take participants cultural needs into account. We are happy to offer our support regarding any further culturally responsive practice and guidance you may seek advice on.

Ultimately this type of research has the potential to reduce the health disparities between Māori and non-Māori.

We wish you every success in your research and the Komiti would appreciate a summary of your findings on completion of the current project.

I hope this letter will suffice in terms of the application. Please contact me should you need any other information that may not have been included in the letter relevant to your research.

Heoi ano

A handwritten signature in black ink, appearing to be "Eru Waiti".

Eru Waiti
Chairperson
Te Komiti Whakarite

Te Komiti Whakarite

245 Antigua Street, Christchurch. Private Bag 4710, Christchurch, New Zealand
Telephone: (64) (3) 364 0640 Ext: 88474 Facsimile: (64) (3) 378 6018

Appendix J²

Drug Abuse Screening Test

NAME: _____

DATE: _____

DRUG USE QUESTIONNAIRE (DAST – 10)

The following questions concern information about your possible involvement with drugs not including alcoholic beverages during the past 12 months. Carefully read each statement and decide if your answer is "Yes" or "No". Then, circle the appropriate response beside the question.

In the statements "drug abuse" refers to (1) the use of prescribed or over the counter drugs may include: cannabis (e.g. marijuana, hash), solvents, tranquilizers (e.g. Valium), barbiturates, cocaine, stimulants (e.g. speed), hallucinogens (e.g. LSD) or narcotics (e.g. heroin). Remember that the questions **do not** include alcoholic beverages.

Please answer every question. If you have difficulty with a statement, then choose the response that is mostly right.

These questions refer to the past 12 months.

Circle Your Response

- | | | |
|----------------------------------------------------------------------------------------------------------------------------|-----|----|
| 1. Have you used drugs other than those required for medical reasons? | Yes | No |
| 2. Do you abuse more than one drug at a time? | Yes | No |
| 3. Are you always able to stop using drugs when you want to? | Yes | No |
| 4. Have you had "blackouts" or "flashbacks" as a result of drug use? | Yes | No |
| 5. Do you every feel bad or guilty about your drug use? | Yes | No |
| 6. Does your spouse (or parents) ever complain about your involvement with drugs? | Yes | No |
| 7. Have you neglected your family because of your use of drugs? | Yes | No |
| 8. Have you engaged in illegal activities in order to obtain drugs? | Yes | No |
| 9. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs? | Yes | No |
| 10. Have you had medical problems as a result of your drug use (e.g. memory loss, hepatitis, convulsions, bleeding, etc.)? | Yes | No |

© Copyright 1982 by Harvey A. Skinner, PhD and the Centre for Addiction and Mental Health, Toronto, Canada. You may reproduce this instrument for non-commercial use (clinical, research, training purposes) as long as you credit the author Harvey A. Skinner, Department of Public Health Sciences, University of Toronto.

² This and all other copyrighted forms are included in order to aid the examiners in reading the thesis. Copyrighted material will not be included in the final manuscript submitted to the library.

Appendix K

Alcohol Use Disorders Identification Test

The Alcohol Use Disorders Identification Test (AUDIT), developed in 1982 by the World Health Organization, is a simple way to screen and identify people at risk of alcohol problems.

1. How often do you have a drink containing alcohol?

- (0) Never (Skip to Questions 9-10)
- (1) Monthly or less
- (2) 2 to 4 times a month
- (3) 2 to 3 times a week
- (4) 4 or more times a week

2. How many drinks containing alcohol do you have on a typical day when you are drinking?

- (0) 1 or 2
- (1) 3 or 4
- (2) 5 or 6
- (3) 7, 8, or 9
- (4) 10 or more

3. How often do you have six or more drinks on one occasion?

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

4. How often during the last year have you found that you were not able to stop drinking once you had started?

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

5. How often during the last year have you failed to do what was normally expected from you because of drinking?

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

6. How often during the last year have you been unable to remember what happened the night before because you had been drinking?

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

7. How often during the last year have you needed an alcoholic drink first thing in the morning to get yourself going after a night of heavy drinking?

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

8. How often during the last year have you had a feeling of guilt or remorse after drinking?

- (0) Never
- (1) Less than monthly
- (2) Monthly
- (3) Weekly
- (4) Daily or almost daily

9. Have you or someone else been injured as a result of your drinking?

- (0) No
- (2) Yes, but not in the last year
- (4) Yes, during the last year

10. Has a relative, friend, doctor, or another health professional expressed concern about your drinking or suggested you cut down?

- (0) No
- (2) Yes, but not in the last year
- (4) Yes, during the last year

Add up the points associated with answers. A total score of 8 or more indicates harmful drinking behavior.

Appendix L

Difficulties in Emotional Regulation Scale

1	2	3	4	5
Almost never (0-10%)	Sometimes (11-35%)	About half the time (36-65%)	Most of the time (66-90%)	Almost always (91-100%)

Difficulties in Emotion Regulation Scale (DERS)

Identifier

Date

Please indicate how often the following 36 statements apply to you by writing the appropriate number from the scale above (1 – 5) in the box alongside each item.

- | | |
|--------------------------------------------------------------------|--------------------------|
| 1 I am clear about my feelings (R) | <input type="checkbox"/> |
| 2 I pay attention to how I feel (R) | <input type="checkbox"/> |
| 3 I experience my emotions as overwhelming and out of control | <input type="checkbox"/> |
| 4 I have no idea how I am feeling | <input type="checkbox"/> |
| 5 I have difficulty making sense out of my feelings | <input type="checkbox"/> |
| 6 I am attentive to my feelings (R) | <input type="checkbox"/> |
| 7 I know exactly how I am feeling (R) | <input type="checkbox"/> |
| 8 I care about what I am feeling (R) | <input type="checkbox"/> |
| 9 I am confused about how I feel | <input type="checkbox"/> |
| 10 When I'm upset, I acknowledge my emotions (R) | <input type="checkbox"/> |
| 11 When I'm upset, I become angry with myself for feeling that way | <input type="checkbox"/> |
| 12 When I'm upset, I become embarrassed for feeling that way | <input type="checkbox"/> |

1	2	3	4	5
Almost never (0-10%)	Sometimes (11-35%)	About half the time (36-65%)	Most of the time (66-90%)	Almost always (91-100%)
13	When I'm upset, I have difficulty getting work done			<input type="checkbox"/>
14	When I'm upset, I become out of control			<input type="checkbox"/>
15	When I'm upset, I believe that I will remain that way for a long time			<input type="checkbox"/>
16	When I'm upset, I believe that I'll end up feeling very depressed			<input type="checkbox"/>
17	When I'm upset, I believe that my feelings are valid and important (R)			<input type="checkbox"/>
18	When I'm upset, I have difficulty focusing on other things			<input type="checkbox"/>
19	When I'm upset, I feel out of control			<input type="checkbox"/>
20	When I'm upset, I can still get things done (R)			<input type="checkbox"/>
21	When I'm upset, I feel ashamed with myself for feeling that way			<input type="checkbox"/>
22	When I'm upset, I know that I can find a way to eventually feel better (R)			<input type="checkbox"/>
23	When I'm upset, I feel like I am weak			<input type="checkbox"/>
24	When I'm upset, I feel like I can remain in control of my behaviours (R)			<input type="checkbox"/>
25	When I'm upset, I feel guilty for feeling that way			<input type="checkbox"/>
26	When I'm upset, I have difficulty concentrating			<input type="checkbox"/>
27	When I'm upset, I have difficulty controlling my behaviours			<input type="checkbox"/>

1	2	3	4	5
Almost never (0-10%)	Sometimes (11-35%)	About half the time (36-65%)	Most of the time (66-90%)	Almost always (91-100%)
28	When I'm upset, I believe that there is nothing I can do to make myself feel better			<input type="checkbox"/>
29	When I'm upset, I become irritated with myself for feeling that way			<input type="checkbox"/>
30	When I'm upset, I start to feel very bad about myself			<input type="checkbox"/>
31	When I'm upset, I believe that wallowing in it is all I can do			<input type="checkbox"/>
32	When I'm upset, I lose control over my behaviours			<input type="checkbox"/>
33	When I'm upset, I have difficulty thinking about anything else			<input type="checkbox"/>
34	When I'm upset, I take time to figure out what I'm really feeling (R)			<input type="checkbox"/>
35	When I'm upset, it takes me a long time to feel better			<input type="checkbox"/>
36	When I'm upset, my emotions feel overwhelming			<input type="checkbox"/>

Appendix M

Parenting Sense of Competence Scale

Parenting Confidence

Instructions: Listed below are a number of statements. Please respond to each item, indicating your agreement or disagreement with each statement.

1. The problems of taking care of a child are easy to solve once you know how your actions affect your child, an understanding I have acquired.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

2. Even though being a (parent) could be rewarding, I am frustrated now while my child is at his/her present age.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

3. I go to bed the same way I wake up in the morning—feeling I have not accomplished a whole lot.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

4. I do not know what it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

5. My (parent) was better prepared to be a good (parent) than I am.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

6. I would make a fine model for a new (parent) to follow in order to learn what she/he would need to know in order to be a good (parent).

1	2	3	4	4	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

7. Being a (parent) is manageable, and any problems are easily solved.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

8. A difficult problem in being a (parent) is not knowing whether you're doing a good job or a bad one.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

9. Sometimes I feel like I'm not getting anything done.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

10. I meet my own personal expectations for expertise in caring for my child.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

11. If anyone can find the answer to what is troubling my child, I am the one.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

12. My talents and interests are in other areas, not in being a (parent).

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

13. Considering how long I've been a (parent), I feel thoroughly familiar with this role.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

14. If being a (parent) of a child were only more interesting, I would be motivated to do a better job as a (parent).

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

15. I honestly believe I have all the skills necessary to be a good (parent) to my child.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

16. Being a (parent) makes me tense and anxious.

1	2	3	4	5	6
Strongly agree	Agree	Mildly agree	Mildly Disagree	Disagree	Strongly Disagree

Appendix N

Depression Anxiety Stress Scale

DASS

Please read each statement and circle a number 0, 1, 2 or 3 which indicates how much the statement applied to you over the past week. There are no right or wrong answers. Do not spend too much time on any statement.

The rating scale is as follows:

- 0 Did not apply to me at all
- 1 Applied to me to some degree or some of the time
- 2 Applied to me a considerable degree or a good part of the time
- 3 Applied to me very much or most of the time

1. I found myself getting upset by quite trivial things.	0	1	2	3
2. I was aware of dryness in my mouth.	0	1	2	3
3. I couldn't seem to experience any positive feeling at all.	0	1	2	3
4. I experienced breathing difficulty (e.g. excessively rapid breathing breathlessness) in the absence of physical exertion.	0	1	2	3
5. I just couldn't seem to get going.	0	1	2	3
6. I tended to over-react to situations.	0	1	2	3
7. I had a feeling of shakiness (e.g. legs going to give way).	0	1	2	3
8. I found it difficult to relax.	0	1	2	3
9. I found myself in situations which made me so anxious I was most relieved when they ended.	0	1	2	3
10. I felt that I had nothing to look forward to.	0	1	2	3
11. I found myself getting upset rather easily.	0	1	2	3
12. I felt that I was using a lot of nervous energy.	0	1	2	3
13. I felt sad and depressed.	0	1	2	3
14. I found myself getting impatient when I was delayed in any way (e.g. lifts traffic lights being kept waiting).	0	1	2	3
15. I had a feeling of faintness.	0	1	2	3
16. I felt that I had lost interest in just about everything.	0	1	2	3
17. I felt I wasn't worth much as a person.	0	1	2	3
18. I felt that I was rather touchy.	0	1	2	3
19. I perspired noticeably (e.g. hands sweaty) in the absence of high temperatures or physical exertion.	0	1	2	3
20. I felt scared without any good reason.	0	1	2	3

The rating scale is as follows:

- 0 Did not apply to me at all
- 1 Applied to me to some degree or some of the time
- 2 Applied to me a considerable degree or a good part of the time
- 3 Applied to me very much or most of the time

21. I felt that life wasn't worthwhile.	0	1	2	3
22. I found it hard to wind down.	0	1	2	3
23. I had difficulty in swallowing.	0	1	2	3
24. I couldn't seem to get any enjoyment out of the things I did.	0	1	2	3
25. I was aware of the action of my heart in the absence of physical exertion (e.g. sense of heart rate increase heart missing a beat).	0	1	2	3
26. I felt down-hearted and blue.	0	1	2	3
27. I found that I was very irritable.	0	1	2	3
28. I felt I was close to panic.	0	1	2	3
29. I found it hard to calm down after something upset me.	0	1	2	3
30. I feared that I would be 'thrown' by some trivial but unfamiliar task.	0	1	2	3
31. I was unable to become enthusiastic about anything.	0	1	2	3
32. I found it difficult to tolerate interruptions to what I was doing.	0	1	2	3
33. I was in a state of nervous tension.	0	1	2	3
34. I felt I was pretty worthless.	0	1	2	3
35. I was intolerant of anything that kept me from getting on with what I was doing.	0	1	2	3
36. I felt terrified.	0	1	2	3
37. I could see nothing in the future to be hopeful about.	0	1	2	3
38. I felt that life was meaningless.	0	1	2	3
39. I found myself getting agitated.	0	1	2	3
40. I was worried about situations in which I might panic and make a fool of myself.	0	1	2	3
41. I experienced trembling (e.g. in the hands).	0	1	2	3
42. I found it difficult to work up the initiative to do things.	0	1	2	3

Note: From *Manual for the Depression Anxiety Stress Scales* (2nd Ed.), by S. H. Lovibond and P. F. Lovibond, 1995, Sydney, NSW: Psychology Foundation of Australia. Copyright 1995 by the Psychology Foundation of Australia Inc. Reprinted with permission. Further information available from: <www.psy.unsw.edu.au/dass/>.

Appendix O

Parental Focus on their Child Scale

How to score: the below scale is rated by the clinician following interviews with the parent and observation of the parent and child together.

1. No evidence of parent behaviour or attitude, and evidence to the contrary.
2. Some occasional evidence of parent behaviour or attitude, but more evidence to the contrary.
3. A mix of evidence suggesting inconsistent behaviours or attitudes towards their child.
4. Evidence that the parent displays this behaviour or has this attitude.
5. Significant evidence that parent displays this behaviour and has this attitude.

1. Parent monitors child's behaviour to a degree appropriate for the child's development	1	2	3	4	5
2. Parent's conversational content indicates that they are always aware of where their child is and who is caring for them	1	2	3	4	5
3. Parent responds to child's needs even when help is not requested	1	2	3	4	5
4. Parent acknowledges responsibility for ongoing care and protection of the child	1	2	3	4	5
5. Parent sees the current state of the child as the result of their own parenting	1	2	3	4	5
6. Parent takes action to ensure safety and wellbeing of child when needed	1	2	3	4	5
7. Parent thinks about and is concerned about their child's wellbeing	1	2	3	4	5

Appendix P

Working Model of the Child Interview

WORKING MODEL OF THE CHILD INTERVIEW

Charles H. Zeanah

Diane Benoit

Marianne Barton

1986, rev. 1993

Introduction

This is a structured interview to assess parents' internal representations or working model of their relationship to a particular child. The setting of the interview should be comfortable enough to allow for attention to the questions posed and a relaxed atmosphere that permits the opportunity for reflection.

The introductory section on developmental history is optional, depending upon the setting and purpose for which the interview is used. Otherwise, the interviewer should follow the outline. The interview allows for some follow-up probes, particularly those that encourage the individual to elaborate on responses. ...the interviewer [should] not make interpretative comments, since we are interested in the degree to which individuals make these links on their own. Requests for clarification about contradictions may be made but only for the purpose of ascertaining whether the individual maintains contradictory views of the infant and only after allowing the individual an opportunity to recognize, acknowledge, and resolve the contradictions on his/her own. Essentially, the purpose of the interview is to have individuals reveal as much as possible in a narrative account of their perceptions, feelings, motives, and interpretations of a particular child and their relationship to that child.

Reference

Zeanah, C.H., & Benoit, D. (1995). Clinical applications of a parent perception interview in infant mental health. *Child and Adolescent Psychiatric Clinics of North America*, 4, 539-554.

Interview

We are interested in how parents think and feel about their children. This interview is a way for us to ask you about *child's name* and your relationship to *him/her*. The interview will take us about an hour to complete.

(1) I'd like you to begin by telling me about your child's development.

(1a) Let's start with your pregnancy. I'm interested in things like whether it was planned or unplanned, how you felt physically and emotionally, and what you were doing during the pregnancy (working, etc.). *In a follow-up probe, find out how much the baby was wanted or not wanted.* Had you ever been pregnant before? Why did you want to get pregnant at this time in your life? When did the pregnancy seem real to you? What were your impressions about the baby during pregnancy? What did you sense the baby might be like (including gender, temperament/personality)?

The idea is to put the subject at ease and to begin to obtain a chronological history of the

pregnancy. Additional probes may be necessary to make sure that the individual is given a reasonable opportunity to convey the history of his/her reactions to and feelings about the pregnancy and the baby (which may or may not be the same).

(1b) Tell me about labor and delivery. *Give some time to respond before*

proceeding. How did you feel and react at the time? What was your first reaction when you saw the baby? What was your reaction to having a boy/girl? How did your family react? *Be sure to include husband/partner, other siblings.*

(1c) Did the baby have any problems in the first few days after birth?

How soon was the baby discharged from the hospital? Did you decide to breastfeed or bottlefeed? Why? What was the experience of breast-/bottle feeding like for you?

(1d) How would you describe the first few weeks at home in terms of feeding, sleeping, crying, etc. *This is often a very important time because it may set the "emotional tone" of the baby's entrance into the family, particularly if the delivery and perinatal period were routine.*

(1e) Tell me about your baby's developmental milestones such as sitting up, crawling, walking, smiling, and talking. *Be sure to get a sense of the ways in which the baby was thought to be different, ahead or behind in motor, social, and language development.* Did you have any sense of your baby's intelligence early on? What did you think?

(1f) Did your baby seem to have a regular routine? What happened if you didn't stay in the routine?

(1g) How has the baby reacted to separations from you? *Try to get a sense of the baby's reactions at various ages.* Were there any separations of more than a day in the first or second year? How did the baby react? How was it for you? How did you feel? What did you do?

(1h) How and when did you choose your baby's name? Find out about family names, etc. How well does your baby's name fit him/her?

(2) Does your baby/child get upset often? *Give some time to respond before proceeding to specific queries.* What do you do at these times? What do you feel like doing when this happens? What do you feel like at these times?

(2a) What about when he/she becomes emotionally upset? Can you recall a specific example (or tell about a time when your child was emotionally upset [e.g., sad, frightened]). *Make sure that subject describes incident(s) about the child being sad, frightened and not only angry. Also, indicate that you want an example by providing a reasonably long time to think of one.* What did you do when that happened? What did you feel like doing? How did you feel or what was that like for you to see him/her upset like that? *If the subject becomes extremely anxious and cannot recall an example, then proceed to part (2b).*

(2b) Tell me about a time when he/she was physically hurt a little bit (e.g., a bump on head, scraping knees, cuts, bleeding) – in terms of what happened, what you did and what you felt. *Be sure to find out what the subject felt like and did.*

(2c) Tell me about a time when your baby/child was ill (e.g., ear infection, measles, flu/cold, etc), in terms of what happened, what you did and what you felt like. *Again, include what this experience was like for the parent and how they responded to the child affectively and behaviorally.*

(3) Describe your impression of your child's personality now. *Give the subject enough time to respond to this before proceeding to specific descriptors below.*

(3a) Pick 5 words (adjectives) to describe your child's personality. After you have told me what they are, I will ask you about each one. *For each one.* What is it about him/her that makes you say that? *Then again for each one,* tell at least one specific incident which illustrates what you mean by each word that you chose. *You may tell the subject that it is fine to use any of the descriptors they used in response to the general probe above, but do not remind them what they said before you have given them time to recall themselves. Some subjects will have a hard time coming up with 5 descriptors. If you feel that they cannot come up with 5, then move on. The numbers are less important than the descriptions.*

- (4) At this point, whom does your child remind you of? In what ways? When did you first notice the similarity? *If only one parent is mentioned ask. In what ways does the child remind you of (the other parent)? The following questions should be asked whether or not the parents have been mentioned.* Which of his/her parents is your child most like now? In what ways is your child's personality like and unlike each of his/her parents'?
- (4a) Are there any family characteristics on your side you see in your child's personality? What about (other parent)'s side?
- (4b) How did you decide on your child's name? How well does the name seem to fit?
- (5) What do you feel is unique or different about your child compared to (what you know of) other children?
- (6) What about your child's behavior now is the most difficult to handle? Give a typical example.
- (6a) How often does this occur? What do you feel like doing when your child reacts that way? How do you feel when your child reacts that way? What do you actually do?
- (6b) Does he/she know you don't like it? Why do you think he/she does it?
- (6c) What does the child do after you respond to the difficult behavior in the way you described? How do you imagine the child feels when you respond this way?
- (6d) What do you imagine will happen to this behavior as your child grows older? Why do you think so/what makes you feel that way?
- (7) How would you describe your relationship to your child now? *Give time to respond.*
- (7a) Pick 5 words (adjectives) to describe your relationship. For each word, describe an incident or memory that illustrates what you mean.
- (8) What pleases you most about your relationship with your baby? What do you wish you could change about it?
- (9) How do you feel your relationship with your child has affected your child's personality? *Give ample time to respond.*
- (10) Has your relationship to your child changed at all over time (*since birth*)? In what ways? What's your own feeling about that change?
- (11) Which parent is your child closest to now? How can you tell? Has it always been that way? Do you expect that to change (as the child gets older, for instance)? How do you expect it to change?
- (12) Tell a favorite story about your child – perhaps one you've told to family or friends. I'll give you a minute to think about this one. *If the subject is struggling, you may tell them that this doesn't have to be the favorite story, only a favorite.* What do you like about this story?
- (13) As you know, the first (age of child) months/years can be difficult at times – what is your worst memory of (child's name)'s first (age of child) months/years of life?
- (14) Are there any experiences which your child has had which you feel may have been a setback for him/her? Why do you think so? *Indirectly, we're trying to determine whether the parent feels responsible in any way for the setbacks. Therefore, be sure to give time to respond before moving on to the more direct questions which follow.*
- (14a) Do you have any regrets about the way you've raised your child so far?
- (14b) If you could start all over again, knowing what you know now, what would you do differently?

(15) Do you ever worry about your child? What do you worry about? How worried do you get about (*list each worry*)?

(16) If your child could be the same age forever, let's say you can freeze him/her in time – any age at all – what would you prefer that age to be? Why (what do you like about that age?).

(17) As you look ahead, what do you think will be the most difficult time in your child's development? Why do you think so?

(18) What do you expect your child to be like as an adolescent? What makes you feel that way? What do you expect to be good and not so good about this period in your child's life?

(19) Think for a moment of your child as an adult. What hopes and fears do you have about that time?

G:\beh\nih2001\working model of the child interview.doc

Appendix Q

Referral Form

School of Health Sciences
College of Education, Health and Human Development
Telephone: +64 21 0298 1751
Email: sarah.whitcombe-dobbs@pg.canterbury.ac.nz
November 2015

Families at risk: mechanisms for change Referral form

Name:

Address:

Phone number:

Ethnicity:

Nature of previous involvement with CYF:

Any known mental health or substance use disorders, or intellectual disability? *If yes, please specify*

Any important risk considerations? (suicide, aggressive behaviour, dog etc)

Relevant cultural or personal factors:

Referrer's name & role:

Contact phone number:

Email:

Please send this form to: sarah.whitcombedobbs@pg.canterbury.ac.nz

Appendix R

Pamphlet

Are you interested in taking part in a research project? Have you had contact with Oranga Tamariki/Child, Youth and Family?



I'm doing a project through the University of Canterbury looking at how parents can make positive changes for themselves and their children. If you agree to join in, I would meet with you and hear about your life and experiences as a parent. The goal is to find ways for things to change in the future, for other parents like you. Your Child, Youth and Family/Oranga Tamariki social worker, or their manager, won't know if you agree, or what you have said.

Where?

Wherever suits you best – I can come to your home, or you can come to the office or another place you'd be happy to meet.

How long will it take?

One to three meetings face-to-face.

Any questions?
Phone/text: 021 0298 1751
Researcher: Sarah Whitcombe-Dobbs
Email: sarah.whitcombedobbs@pg.canterbury.ac.nz

Appendix S

Information and Consent Forms

School of Health Sciences
College of Education, Health and Human Development
Telephone: +64 21 0298 1751
Email: sarah.whitcombe-dobbs@pg.canterbury.ac.nz
November 2015



Families at risk: mechanisms for change

Information Sheet for Participants

My name is Sarah Whitcombe-Dobbs and I am a registered psychologist and PhD student at the University of Canterbury. I am researching characteristics linked to behaviour change in parents who have involvement with Child, Youth and Family.

If you choose to take part in this study, your involvement in this project will include participating in an assessment process with me that takes about four hours of face to face time. It involves answering questions and filling in questionnaires with my help. I will record part of the interview so I can listen to it again later. I will also take written notes and these will be made up into files. I will also be gathering some of your data from Child, Youth and Family's database at the beginning when I first meet with you, and again after six months, two years and five years. This data includes notification history and personal history.

As a follow-up to this investigation, you will be asked if you are willing for further information from Child, Youth and Family to be released to me. However, your Child, Youth and Family social worker, or their supervisor and manager, won't be told whether or not you participate in this study. They won't be given any information about you unless I have a concern for yours or someone else's safety. If I have Masters students in the future, they may have access to the information you agree to share with me.

In the performance of the tasks and application of the procedures there are risks that some questions may lead to feeling upset. If this happens then I will help you find some support, either from a friend or family member, or from the Crisis Response team at Christchurch Hospital.

Participation is voluntary and you have the right to withdraw at any stage without penalty. You may ask for your information to be returned to you or destroyed at any point. If you withdraw, I will remove information relating to you. However, once analysis of raw data starts on June 1st, 2017, it will become increasingly difficult to remove the influence of your data on the results.

The results of the project may be published, but you may be assured of the complete confidentiality of data gathered in this investigation: your identity will not be made public without your prior consent.

To ensure anonymity and confidentiality, information gathered will be stored securely at the University of Canterbury, and your data will have a code number rather than your name on it. Your name and contact details will be stored in working files for the duration of your involvement, and then destroyed once it is no longer needed. My supervisor and other

members of the research team will have access to your data but not to your name or contact details. The data will be stored for at least ten years.

A thesis is a public document and will be available through the UC Library. Please indicate to me on the consent form if you would like to receive a copy of the summary of results of the project. The project is being carried out as a requirement for the degree of Doctor of Philosophy by Sarah Whitcombe-Dobbs under the supervision of Dr. Michael Tarren-Sweeney, who can be contacted at michael.tarren-sweeney@canterbury.ac.nz. He will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch (human-ethics@canterbury.ac.nz).

If you agree to participate in the study, you are asked to complete the consent form and return to

Sarah Whitcombe-Dobbs

School of Health Sciences

Private Bag 4800

Christchurch 8140

School of Health Sciences
College of Education, Health and Human Development
Telephone: +64 21 0298 1751
Email: sarah.whitcombe-dobbs@pg.canterbury.ac.nz
November 2015

Families at risk: assessment and intervention

Consent Form for Participants

☐ I have been given a full explanation of this project and have had the opportunity to ask questions.

☐ I understand what is required of me if I agree to take part in the research.

☐ I understand that participation is voluntary and I may withdraw at any time without penalty.

Withdrawal of participation will also include the withdrawal of any information I have provided

should this remain practically achievable.

☐ I understand that any information or opinions I provide will be kept confidential (except if there is a safety concern for myself or someone else) to the researcher and her research team, and that any published or reported results will not identify the participants. The research team might include Masters students working with the principal researcher. I understand that a thesis is a public document and will be available through the UC Library.

☐ I understand that all data collected for the study will be kept in locked and secure facilities and/or in password protected electronic form and will not be destroyed for 10 years.

☐ I understand that information from my file at Child, Youth and Family/Oranga Tamariki will be released to the principal researcher.

☐ I understand the risks associated with taking part and how they will be managed.

☐ I understand that I can contact the researcher Sarah Whitcombe-Dobbs sarah.whitcombe-dobbs@canterbury.ac.nz or supervisor Michael Tarren-Sweeney michael.tarren-sweeney@canterbury.ac.nz for further information. If I have any complaints, I can contact

the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch

(human-ethics@canterbury.ac.nz).

☐ I would like a summary of the results of the project.

☐ By signing below, I agree to participate in this research project.

Name:

Signed:

Date:

Email address:

Please return this form in the envelope provided to:

Sarah Whitcombe-Dobbs
School of Health Sciences
Private Bag 4800
Christchurch 8140

Thank you very much,
Sarah Whitcombe-Dobbs

Appendix T

Background Interview Coding Template

Section 1: Content of developmental history Yes=1; No=0

1. Did participant describe presence of physical abuse?
Yes ☐ No ☐
2. Did participant describe presence of sexual abuse?
Yes ☐ No ☐
3. Did participant describe experiencing neglect?
Yes ☐ No ☐
4. Did participant describe experiencing transience?
Yes ☐ No ☐
5. Did participant describe experiencing multiple caregiver changes?
Yes ☐ No ☐
6. Did participant go into out-of-home care themselves, including whānau care?
Yes ☐ No ☐
7. Did participant have an older child who has previously been removed from their care?
Yes ☐ No ☐
8. Did participant describe a protective or good relationship with at least one adult?
Yes ☐ No ☐
9. Did participant mention a suicide attempt or attempts?
Yes ☐ No ☐

Section 2: Content of current problems/main concerns Yes=1; No=0

1. Conflict with partner?
Yes ☐ No ☐
2. Financial problems?
Yes ☐ No ☐
3. Court case ongoing?
Yes ☐ No ☐
4. Poor housing?
Yes ☐ No ☐
5. Conflict or stress with OT?
Yes ☐ No ☐

Section 3: Quality of narrative

Coding key:

- 1=no evidence for this construct or behaviour
- 2=very little evidence for this construct
- 3=minor but noticeable evidence for this construct
- 4=moderate evidence for this construct
- 5=strong evidence for this construct
- 6=major and saturated evidence for this construct

1. Fragmentation (ordinal)

1	2	3	4	5
---	---	---	---	---

2. Stream of consciousness (ordinal)

3.

1	2	3	4	5
---	---	---	---	---

1	2	3	4	5
---	---	---	---	---

4. Intrusion of traumatic memories into narrative (ordinal)

1-2=not at all or once or twice

3-4=several times

5-6=frequently throughout narrative

1	2	3	4	5
---	---	---	---	---

5. Expressed emotionality (intensity of affect) (ordinal)

1-2=no emotion content or very little

3-4=a normal/appropriate amount of emotion

5-6=heavily emotional/intense

1	2	3	4	5
---	---	---	---	---

6. Presence of child/children (ordinal)

1=no evidence for parent thinking about child/being preoccupied with child

2=very little evidence for parent thinking about child/being preoccupied with child

3=minor but noticeable evidence for parent thinking about child/being preoccupied with child

4=moderate evidence for parent thinking about child/being preoccupied with child

5=strong evidence for parent thinking about child/being preoccupied with child

6=major and saturated evidence for parent thinking about child/being preoccupied with child

1	2	3	4	5
---	---	---	---	---

7. Severity of described trauma (ordinal)

1-2=little or no trauma

3-4=moderate trauma

5-6=severe trauma

1	2	3	4	5
---	---	---	---	---

Section 4: further questions (nominal scales)

1. How was school for you? (circle no.)
0=no answer
1=negative tone/disliked school
2=neutral or mixed experiences of school
3=positive tone/liked school
2. When did things go wrong for you? (circle no.)
0=no answer
1= early childhood/from birth
2= childhood
3= adolescence
4= adulthood
3. When was a good time in your life? (circle no.)
0=no answer
1=a time during childhood
2=a time during adulthood/working
3=now is a good time
4. How do you cope with tough times? (circle no.)
0=no answer
1=gives generic statement such as "I just have to"
2=specifies unhelpful strategy (such as drugs)
3=specifies helpful strategy (such as exercise)
4=specifies relational support (such as from friend or professional)
5. What are your hopes and dreams for yourself and your children? (circle no.)
0=no answer
1=specifies adult dreams only
2=specifies child dreams only
3=specifies both child and adult dreams

Appendix U

Confidentiality Agreement Researcher

School of Health Sciences

Tel: +64 3 366 7001 ext. 8691
www.health.canterbury.ac.nz
healthsciences@canterbury.ac.nz



Confidentiality agreement – research assistant

I, _____, am taking part on a research project as a research assistant with the University of Canterbury. This requires that I access data collected by principal researchers at the University of Canterbury as part of the research project: Families at Risk: Mechanisms for Change.

- ☐ I understand that I will be exposed to data from confidential interviews and assessments. The information in these transcripts has been revealed by interviewees who agreed to participate in this research on the condition that the content of their interviews and any associated information remain strictly confidential to the researchers.
- ☐ I understand that I have a responsibility to honour this confidentiality agreement.
- ☐ I will not divulge any information contained in the transcripts, and any information associated with the data collection or the research project per se with anyone except the project researchers.
- ☐ I agree to:
 - ☐ Keep all the research information shared with me confidential by not discussing or sharing the content of the interviews in any form or format and any information associated with the data collection or the research project per se with anyone other than the project researchers.
 - ☐ Keep all research information in any form or format secure while it is in my possession.
 - ☐ Return all research information in any form or format to the principal researcher when I have completed the tasks.
 - ☐ After consulting with the principal researcher, erase or destroy all research information in any form or format regarding this research project that is not returnable (e.g. information stored on my computer hard drive).

Signature:

Signature:

Date:

Date:

Sarah Whitcombe-Dobbs (principal researcher)

Appendix V

Coding Sheets Working Model of the Child Interview

Subject _____

Classification _____

QUALITATIVE SCALES

Richness of Perceptions: _____

Openness to Change: _____

Intensity of Involvement: _____

Coherence: _____

Caregiving Sensitivity: _____

Acceptance: _____

CONTENT SCALES

Infant Difficulty: _____

Fear for Infant's Safety: _____

AFFECTIVE TONE

Joy: _____

Pride: _____

Anger: _____

Disappointment: _____

Anxiety: _____

Guilt: _____

Indifference: _____

Other: _____

Comments:

Appendix W

Alternative Coding Schedule Working Model of the Child Interview

- 2) Does your baby/child get upset often? *Give some time to respond before proceeding to specific queries.* What do you do at these times? What do you feel like doing when this happens? What do you feel like at these times?
- (2a) What about when he/she becomes emotionally upset? Can you recall a specific example (or tell about a time when your child was emotionally upset [e.g., sad, frightened]). *Make sure that subject describes incident(s) about the child being sad, frightened and not only angry. Also, indicate that you want an example by providing a reasonably long time to think of one.* What did you do when that happened? What did you feel like doing? How did you feel or what was that like for you to see him/her upset like that? *If the subject becomes extremely anxious and cannot recall an example, then proceed to part (2b).*
- (2b) Tell me about a time when he/she was physically hurt a little bit (e.g., a bump on head, scraping knees, cuts, bleeding) – in terms of what happened, what you did and what you felt. *Be sure to find out what the subject felt like and did.*
- (2c) Tell me about a time when your baby/child was ill (e.g., ear infection, measles, flu/cold, etc), in terms of what happened, what you did and what you felt like. *Again, include what this experience was like for the parent and how they responded to the child affectively and behaviorally.*

1. Parent denies that their child gets upset, or is unable to think of an example. Does not use any emotion words to describe child or own feelings.
2. Parent is able to think of vague general example but not a specific one. Does not use any (or very limited) emotion words to describe child or own feelings. Parent may show or describe amusement at child's distress or callousness.
3. Parent is able to think of a specific example and uses emotion words to describe own and child's feelings. Examples may be extreme, or only for one question. Not necessarily thoughts and feelings for each type of upset. Parent's emotional response may not be proportional (i.e. "devastated" for their child grazing their knee).
4. Parent describes specific examples, along with own and child's thoughts and feelings, for each type of upset. Examples are appropriate and recent, and the parent can remember sufficient details of incident or situation to provide the listener with an idea of what happened. Parent's emotions are proportional to specifics.

(6) What about your child's behavior now is the most difficult to handle? Give a typical example.

(6a) How often does this occur? What do you feel like doing when your child reacts that way? How do you feel when your child reacts that way? What do you actually do?

(6b) Does he/she know you don't like it? Why do you think he/she does it?

What do you think is going on in their mind at the time?

(6c) What does the child do after you respond to the difficult behavior in the way you described? How do you imagine the child feels when you respond this way?

1. Parent labels behaviour but is hostile to child and shows no insight, or attributes unrealistic malice to the child.
2. Parent labels the behaviour without strong hostility (irritation/frustration is ok), but is unable to identify what might be going on in the child's mind. ("I have no idea", or "I don't know"), or gives a reason for the behaviour that shows significant lack of developmental understanding of their child.
3. Parent labels behaviour without strong hostility and offers a generic reason as to why the child behaves, that way, or what might be going on in their minds ("I want to get my own way")
4. Parent labels behaviour without strong hostility, and hypothesises a convincing reason for it, taking into account the child's point of view and their own reactions and responses influencing how the child experiences the interaction.

7) How would you describe your relationship to your child now? *Give time to respond.*

(7a) Pick 5 words (adjectives) to describe your relationship. For each word, describe an incident or memory that illustrates what you mean.

1. Parent does not use words to describe the relationship – talks about themselves again.
OR Parent uses only unpleasant words to describe the relationship, describes examples of things their child does that annoys them. E.g. “clingy” “relentless” etc.
2. Parent uses generic pleasant and/or unpleasant words but these are not linked to any specific memories or incidents in a way that makes sense. E.g. “wonderful, just amazing” without further elaboration.
3. Parent uses some words to describe the relationship which may be both pleasant and/or unpleasant, and is able to give an example, incident or memory linked to the word in a way that makes sense. May be idealised or ‘scripted’.
4. Parent uses 3-5 words to describe the relationship and links each one to an example or description (does not have to be perfect). Gives the listener an idea of the nature of the relationship that makes it clear that the parent sees it as reciprocal, not just one way.

12) Tell a favorite story about your child – perhaps one you’ve told to family or friends. I’ll give you a minute to think about this one. *If the subject is struggling, you may tell them that this doesn’t have to be the favorite story, only a favorite.* What do you like about this story?

NB: if this question is not asked, look through rest of transcript for an anecdote about child that fits criteria. If none are found, code (1).

1. Parent tells a story, but the child is not the central character or what the story is about. It may be something someone else has said to the child, or it may be about themselves.
2. Parent tells a story in which their child features, but it is lacking in warmth or the “best” bits are not actually about the child.
3. Parent gives anecdote about child that may be brief or lacking in detail –seemingly not one that they have told before.
4. Parent tells a warm/cute/funny/proud story that is about their child.

(14) Are there any experiences which your child has had which you feel may have been a setback for him/her? Why do you think so? *Indirectly, we're trying to determine whether the parent feels responsible in any way for the setbacks. Therefore, be sure to give time to respond before moving on to the more direct questions which follow.*

(14a) Do you have any regrets about the way you've raised your child so far?

(14b) If you could start all over again, knowing what you know now, what would you do differently?

1. Parent denies any setbacks claims to have no regrets and says that they would do nothing differently.
2. Parent identifies a setback in which they hold no personal responsibility (i.e. someone else's fault or unlucky), and do not say at 14b that they would take action in some way to alter that setback.
3. Parent identifies one or two setbacks, and gives a vague or no answers to 14a and 14b. 14b may be in their own interests.
4. Parent identifies a setback OR describes regrets/changes they would make were they to do it all over again in a way that shows their motivation is their child's welfare and interests.

Appendix X

Coding of Interview Transcripts: Description of Findings

This appendix outlines the various classifications assigned to the WMCI with reference to participants' transcripts. Firstly, the WMCI traditional classifications of balanced, disengaged and distorted are described, along with text examples, followed by parental RF scores are described. Examples for each classification of low or medium parental RF are given, with reference to excerpts from selected participants. It should be noted that whole interview transcripts are coded rather than smaller excerpts. These are given to illustrate relevant characteristics of the classification rather than as definitive text for a coding decision.

Working Model of the Child Interview: Parental Representations of Parent-Child Relationships

Balanced representations

Five participants' WMCI interviews were assigned a classification of "balanced". These interviews "convey coherence, openness to change, richness of detail, and a sense of the caregiver as engrossed in his/her relationship with the infant. The caregiver values the relationship with the infant and considers it to have effects on the infant's behaviour and development and caregiving sensitivity is a characteristic of descriptions of the infant and the infant-caregiver relationship" Classifications have subtypes of "balanced-full", "balanced-restricted", or "balanced-restrained". This allows for some aspects, within an overall "balanced" classification, that are similar to the "disengaged" or "distorted" classifications. In the present study, no participants had classifications that were "balanced-full" or "balanced-restrained", and five participants' WMCI received classifications of "balanced-restricted". Although whole interviews are classified rather than specific excerpts, some extracts usefully illustrate the content of the "balanced-restricted" subtype.

Participant 717 had previously described situations in which her daughter (24 months) was upset after her brothers would not let her play with them, and when she had hurt herself a little bit physically. This mother was asked what it felt like for her to see her upset like that, and she said,

“oh it breaks my heart I hate it when she’s upset. And when she gets frightened though, if she gets scared of something she doesn’t get sad or try to hide from it, she gets real, like, she’ll just start yelling or hitting or getting angry...whenever she gets an owie she’ll go ‘ouch!’ and wants you to kiss it better, and give her a wee cuddle and everything...” (participant 717. p. 6)

Then, in response to a query about how she feels to see her child hurt herself,

“Um, well, I don’t know I feel ok, I just, I just like to nurture her...”
(participant 717. p. 6)

When this participant was asked how she felt her relationship with her daughter had affected her development and personality, she said,

“Ah. Quite a bit. Like yeah, cos when I see that frustration come out with the yelling, like that’s me and her Dad right there (laughs). And that’s us with her yeah, cos we’ve lost, like we’ve lost our cool. But um, I think that the bond that we do have together, I think um, like the bond that we have she knows she’s safe and she feels confident going anything...” (participant 717, p. 10)

Overall, this mother gave answers that indicated she was integrating her experiences from the past into her present. The anxiety and the guilt that she expressed appeared appropriate in the context of what had happened, and she was able to reflect on the impact of her own behaviour on her child. When describing her child’s behaviour, her daughter’s

negative affects were recognised and understood, albeit not in a complex way. The subtype “restricted” was given due to her reported dismissiveness at times to her daughter’s upsets, and to her reported impulse to walk away from her daughter. Overall, however, this mother does not appear to feel overwhelmed or unable to function adequately in the relationship, and the child’s needs, desires and personality are viewed in a balanced way.

Disengaged representations

Among the 26 participants who completed the WMCI, seven yielded classifications of “disengaged”. These interviews are characterised by the parent’s “prominent disengagement from the relationship with the infant”, and “there is also evidence of lack of caregiver emotional and personal involvement with the infant and infant-caregiver relationship. There may seem to be little flexibility to accommodate changes in the representation over time. Incoherence is likely to be evident primarily by intellectualised distance, coolness, a consistent emotional withholding in descriptions of the infant or the infant-caregiver relationship”. The classification has two subtypes: “disengaged-impoverished”, which is typified by emotional impoverishment, a lack of detail about the infant or stereotyped, but unconvincing, positive responses, and “disengaged-suppressed”, which is typified by emotional aloofness and often contains a focus on activity rather than the infant-caregiver relationship. Some extracts usefully illustrate the “disengaged” representation. Participant 731’s responses suggested a discomfort with the intensity of his 10-month old daughter’s emotional involvement. When asked about his daughter’s behaviour and what is most difficult to handle, he responded,

“Her neediness. Her constant neediness.

[Interviewer: how often does this occur?]

Every day. But I s- it’s I guess this is one of those things that I, it’s my own fault, um I guess of her her her clinginess and neediness is my own fault cos

it's um I c- should've shared her around other people yeah, she probably wouldn't be so attached to the one, to just me so yeah.

[Interviewer: How do you feel when she reacts that way, in a needy way?]

Um sometimes it irritates me but other times I just...I ignore it. So um I kind of I kind of have to ignore to show her that I don't give into her every will.

[Interviewer: So sometimes you ignore it, how do you feel when she's...]

Ohhh kind of depends. So there's um there's a whole fine line of if she's crying and she's real crying or if she's crying and there's no tears. If she's crying and no tears, I walk away. Like no tears, you suck it up and deal with it. Whereas if she's crying, I kind of don't like to see her cry so I kind of feel bad..." (participant 731, p. 10).

This father's description of his daughter and their relationship showed indifference at times to her emotional state. He spoke about his frustration with her dependence on him, and how her strong preference to his care above others was a source of annoyance and something he preferred to ignore. When discussing her needs and her levels of distress, he acknowledged she did feel distress and he described his own dislike of it, but primarily with a focus on her physical needs and the ways in which he met these. In this transcript, there were some features of the "distorted" classification, such as anger, and some features of the "balanced" classification, such as joy and pride, but without reconciling these mixed feelings into a coherent narrative. When considering the whole transcript alongside the age of his infant daughter, the overarching themes showed a lowered sensitivity, little emotional content and some instances of indifference.

Participant 737 was difficult to engage in discussion regarding her own feelings about her nine month-old daughter. When asked to describe a time when her daughter had been physically hurt a little bit, she said,

“She fell out of that rocker [pointing]. Yep. It’s when she first started arching her back.

[Interviewer: so what did you do when that happened?]

What did I do? I was like oh my god what if CYFs see that they’re going to take her off-of me! [laughs] Yeah, yeah. But – a cold flannel on the face and I was like, did you learn your lesson? No she hasn’t learned her lesson. The other time was jolly jumper doorframe.

[Interviewer: and how did that feel?]

Um. She doesn’t jump near the doorframe no more.

[Interviewer: I meant, how was that one for you?]

Um I don’t like my kids getting hurt at all.” (participant 737, p. 5).

When asked about her own feelings when her daughter had been sick, participant 737 again struggled to identify her own emotional response, answering, *“well, I think Dad was more emotional than I was [laughs]”* (participant 737, p. 5). This participant appeared uncomfortable with a discussion of emotions or distress, instead laughing and giving a light comment when describing difficult situations. Her responses were lacking in depth and detail, but there was no overt hostility or guilt in the narrative. She described positive feelings like “good”, and said that she and her daughter were very close, but these answers were often short and she did not appear to clearly remember incidents to illustrate further what she was describing. In contrast, her descriptions of her own experiences during pregnancy and birth were richer in detail. This parent showed a limited awareness of her daughter’s developmental stage along with being matter-of-fact about potential risks and dangers. There was an overarching sense of emotional distance.

The “disengaged” subtype includes parents who occasionally reveal aversion towards their child as underlying their avoidance of emotional engagement. Participant 725 gave

some impulsive answers that suggested hostility towards her 10 year-old child at times, while also describing her relationship with him in positive terms. For example, the interview was introduced as follows,

“[Interviewer: This interview is looking at how parents think and feel about their children]

[Interrupting] Sometimes I hate mine [laughs]” (participant 725, p. 1).

It should be noted that it is natural for parents to think and speak differently about an older child from how they might think about an infant. Child age and developmental stage is a moderating factor in parents’ levels of concern about certain risks. Although anger in the WMCI is normally associated with the “distorted” type, participant 725 had an angry tone rather than directing anger towards her son. Instead, she showed striking indifference to her son’s distress, and a lack of understanding of what his subjective experiences may have been like. When asked what the first few weeks of her son’s life were like, she responded,

“Yeah he...I don’t think he really liked to sleep. Yeah. He ne- he didn’t sleep well as a baby and I just felt like I was up every two hours feeding him, so I was...

[Interviewer: so how were you during that time?]

Tired, grumpy [laughs] but I still had to deal with my other two, you know, get [older sibling] to school.

[Interviewer: and how was that kind of emotional atmosphere in the home?]

[Partner] was not supportive at all, you know when it snowed, when it [child] was six weeks old when it snowed, Instead of him going out and getting wood for the fire, I had to go and take [older siblings] with me. Yeah...to get wood. Left [child] home with him, got home to find out that

*apparently all he'd done was scream from the time I'd left and he was ready to kill him, which yeah, that that was started being the downfall of our relationship cos I just found out he didn't want to look after the kids[...]*yeah I wasn't allowed to go out for a coffee with my mate, not not even for an hour it'd be you'd need to come home, deal with them, they won't stop crying*" (participant 725, p. 4).*

In the context of her son's distress, participant 725 struggles to balance her own needs for a break, and her own emotions, in order to respond to his needs:

"[Interviewer: how has he reacted to separations from you, or how did he as a pre-schooler?]

It was hard. He would cry, and carry on. Even they picked up on that so they started doing a strategy, it was like well you put him in the swing, swing him and that thing to calm him down.

[Interviewer: was this at preschool?]

Yep.

[Interviewer: and were there any separations of more than a day or two during the first year?]

No, no.

[Interviewer: how was it for you leaving him at preschool?]

It, it was hard, especially when he's screaming, clinging and...but you know...once he got into the routine, he was fine.

[Interviewer: what did you do when you were leaving him and he was screaming?]

It was...Mum loves you, I'll see you later, bye [laughs]. Cos I just needed...yeah I just needed the break.

[Interviewer: and did [child] get upset often as a baby?]

Yep, yep. Oh yeah definitely.

[Interviewer: what did you do at those times?]

There wasn't much I could do, co he'd just get upset over everything and if I was trying to spend some time with the girls, he just yeah, it was just full on tantrums.

[Interviewer: and what did you feel like doing when this happened?]

Strangling him [laughs]” (participant 725, p. 5).

Overall, this parent acknowledged states of emotional distress in her son when specifically asked about it, but there was no sense of reciprocity. Her descriptions of his experiences of severe trauma were casual in tone, and at one point she spent several minutes finding a photo of her son's head injury stitches to show the interviewer with some expressed amusement and enjoyment. This transcript also showed features associated with the “distorted” representation in terms of self-involvement, but the “disengaged” representation was given due to the core theme of indifference.

Distorted representations

Of the 26 parents who completed the WMCI, 15 received a classification of “distorted”. This representation is characterised by a higher level of parental involvement than in the “disengaged” representation, but containing inappropriate interpretations of, or expectations for, child behaviour, along with inconsistencies contained within the interview itself. “The representation is designated distorted not in comparison to some putative objective reality, but instead, it refers to an internal inconsistency within the representation” . Parents' descriptions of their child “may be highly incoherent in the sense of confused, contradictory, or even frankly bizarre. As a result, the caregiver may have difficulty in remaining focused clearly on the infant and the relationship with the infant” . Excerpts from three participants

whose interviews were classified as “distorted” are described here, but it should be noted that whole interviews are coded so these passages are for illustrative purposes only.

Participant 733 gave an inconsistent picture of her 15 month-old son throughout the interview, sometimes describing him, and her relationship with him, in glowing terms and at other times describing feeling helpless and confused by him:

“[Interviewer: could you pick five words to describe your relationship?

And then I’ll ask you to describe an incident or memory to show me what you mean by each word.]

Talking to a brick wall.

[Interviewer: so what do you mean by that?]

That just, in one ear out the other, well he is only fifteen months but it’s just yeah...it’s horrible.

[Interviewer: so, talking to a brick wall. How else would you describe your relationship?]

[Pause] Nine to five...yeah it feels like a nine to five job but you just don’t clock off.

[Interviewer: right, so a bit longer then?]

Yep, it’s like a 24-hour dairy.

[Interviewer: anything else to describe your relationship?]

Other than him being my best lil, other lil, my best friend and that, um....um it’s just yeah...my world.

[Interviewer: your world. Can you give me an example or memory that makes you feel like that?]

As soon as he entered the world I, my world it, as soon as I found out I was pregnant with him, everything changed” (participant 733, p. 9).

This parent's descriptions of her infant son suggested that her expectations for his understanding were unrealistic. She spoke as though her son engaged in behaviours with the deliberate intention of eliciting certain reactions from her, or to make her feel a certain way. For example, she described his headbutting behaviour as something he engaged in because he knew that she disliked it. Participant 733 also expressed helplessness and a sense of being overwhelmed when her baby was in distress, describing wanting to leave or to lie on the ground crying. In situations where her son was upset due to physical or emotional distress, she described being unable to help him. Overall, her view of herself as a parent was helpless and confused, and there were elements of role-reversal and self-involvement.

Participant 735 likewise struggled with her infant's dependence on her without integrating this tension into a coherent narrative, and she referred to her baby as an inanimate object at times. The five month-old's dependence on her mother appeared to elicit anger and guilt; her mother struggled to maintain focus and attention on her infant without also needing to speak about her own needs:

“[Interviewer: what was the experience of breastfeeding like for you? Or how is it?]

[pause] Um. Like overall it's – um I probably engaged in it a bit more with [older sibling] maybe I don't know [long pauses]. I get-no-I think maybe I get-argh, I think just don't want you on my nipple get off! With her. Yeah well she's she's a lot more impatient as well and she makes horrible sounds unlike [older sibling]. Yeah [laughs] it's just like I don't want I don't want to put that on my boob like ugh, yuck go away! [laughs] it's a it's a horrible thing to say but. [laughs] eh. Gorgeous.

[Interviewer: so not enjoying it as much?]

No, maybe no. Hmm. I don't know. Cos I'm not able to eat, I'm not as um, healthy as I used to, not as able to eat as much, because of my teeth. Yeah, yeah, yeah, no yeah um cos that was something I had to add in to the thing I was supposed to add in last week remember? Yeah, yeah, teeth is one thing. And in fact I just got one temporary one filled the front one. But I got lots of problems and none of my back teeth left. Waiting for my wisdoms to come through, hoping they'll come through, but they haven't yet so.

[Interviewer: so are you in pain?]

Um, most days yeah. That-that doesn't help with anything I suppose. Eh?

It's alright at the moment." (participant 735, p. 4).

This participant expressed strong feelings of both anger and guilt. Her baby's poor sleep and level of crying were a source of distress and frustration for participant 735, but these were not placed into the context of her baby's age or developmental stage. Instead, participant 735 occasionally attributed malevolent characteristics to her infant and compared her unfavourably with her older sibling. There were several implicit appeals to the infant to be reasonable by, for example, being calm while waiting for a feed – which is unrealistic for a five month-old baby. Overall, this parent's relational representation was distorted with regard to the parent-role as well as her perceptions of the infant.

One prominent feature of the interviews with the "distorted" type was the level of anger permeating the narrative. This was not always directed towards the infant in active hostility, but often involved extensive descriptions of the parent's own personal responses to perceived wrongs. This was particularly apparent during the first section of the WMCI when the interviewer asked about pregnancy and birth, as parents were explicitly asked about the circumstances surrounding this. Occasionally, parents with more than one child struggled to maintain their focus on their youngest child (whom the interview was always about), and

changed the topic or provided much more detail about an older sibling. Participant 721's answers to the question about her 17 month-old illustrates this:

“[Interviewer: can you tell me about a time when he was physically hurt a little bit...if you could tell me what happened, what you did and how you felt?]

Okay. He um had a accident at preschool on Monday, bumped his head, got a big egg on his head and a graze on his elbow and his knee. It's sort of the worst accident he's had so far and um then yesterday after the supermarket we got home, I was unpacking the groceries and um [older sibling] got jealous of him or something and I didn't actually see what happened cos I was unpacking the groceries and they were in here, and then he starts crying and I you know that cry, th- you know there's that hurt, I'm hurt cry or the um that other cry you know and I just came straight over and he was he was bawling and she was going sorry I'm sorry like cos I made her say sorry she just says it blasé now. I said no you're not [laughs] get in the naughty corner right now. She's like no, I'm sorry I just I took her over there, came back, gave [child] heaps of cuddles and um s- wiped his nose and then I saw the blood round under his eye, then I'm like [older sibling]! He's bleeding! He is bleeding, look what you done to him! Do you like hurting babies? And I was like that's disgusting, [older sibling]. He is already hurt like um I was just heartbroken for him and I just felt so bad for him like and shit I made her feel like that and she did feel like she um she said we have to make him better Mummy, like when she calmed down from being obviously upset she was in the naughty. Make better and then for the rest of the day she was amazing to him, I cos I I was like if you hurt him again, I am going to take you know her [special, favourite toy] I was like I am going to take [special, favourite toy] away, will take your special thing away, don't you dare hurt him again, he's your little brother. She understands, she's really clever, she understands” (participant 721, p. 10).

This parent was distracted from focusing on her infant himself, and other thoughts and frustrations repeatedly intruded upon her descriptions of him and her relationship with him. Her sense of impatience was apparent and she struggled to balance his needs with her other demands. This is in contrast to the “disengaged” style, wherein parents are less distressed by their own lack of focus on their child. Overall, this parent provided lengthy answers rich in detail about problems in her life that were unrelated to her son, and a sense of anger dominated the narrative.

The excerpts provided above were chosen to illustrate various features of the different representations. All parents, regardless of representation type, also expressed their love for and/or commitment to their child, and their wishes for them to grow up and do well in life in various ways. It seemed that most parents in this population approached their parenting with benevolent intentions, despite clear differences from “typical” parents in needing to navigate their own difficulties. Internal representations of children, and parent-child relationships, are generally not considered in depth by parents. Most parents are busily engaged in the day-to-day activities of living and surviving. Yet, when whole narratives are elicited and examined in detail, distorted thought patterns, unhelpful attributions or a lack of sensitivity and awareness become clear to those outside of the relationship. The child him- or herself, however, is receiving and interacting with their parent’s frame of mind every day, which in turn shapes their view of themselves as people, and their views of the world as a safe, hostile or unpredictable place.

Working Model of the Child Interview: Parental Reflective Functioning

Low Parental Reflective Functioning

Of the 26 WMCI interview transcripts, 15 were coded as having “low” parental reflective functioning, meaning that independent coding yielded scores of two or three. Responses yielding scores within the low range of parental RF must include some efforts at mentalization, but be lacking explicit reflective functioning. Responses may use emotion words to describe states in the child or themselves, but these may lack meaning within the context or have a superficial quality about them. Excerpts from three of the 15 low parental RF transcripts are described below, demonstrating the type and range of responses given by parents within this category.

Participant 715

Participant 715 was a father describing his relationship with his 27-month old son. The coder noted that he “tends to talk in recounted speech in places...quite disparaging about his partner in a number of places – often in self-serving passages, he is quite “full of himself” in places [and] this has lowered his overall score a little...he seems to care about the child in a genuine way”. When asked about his son’s early weeks and separations from him, participant 715 responded in ways that sounded cliché at times, and was unconvincing. For example, when asked about seeing his son for the first time, he said:

“Oh um you know. I I was delighted it it was wonderful you know, um um... he he’s a baby you know yeah you know he’s he’s um well what else can you say?... Um I already had three other boys so.. Yeah, yeah but it is nice. It is it is nice having another son, you know and that sort of thing” (participant 715, p. 2).

This father described caring about his son in several different ways, but often spoke about concrete actions and responses rather than about his or his son’s emotional state in thoughtful ways. When describing the first few weeks at him in terms of his feeding and sleeping,

participant 715 focused on the problems with feeding, and his own action taken to solve this, but his descriptions of his own emotional experiences of this are limited:

“Well um feeding was good. Um sleeping was good. And til he started draining his mother dry... then we had a very upset baby and that sort of thing. We had a very upset mother, because the mother was under the impression that she was a bad mother and that sort of thing, because she couldn't feed her child. Um we even had incidents of that in NICU because um they were saying to her you must express every three hours. And of course (partner) was doing that and would have no milk but if (partner) left it four hours and then expressed she had shitloads of milk you see so in the end I had to go to them and say hey listen it's like this, you're asking her to do this, but if you leave her another hour she's got all the milk in the world you know and that sort of thing right so they did that and that sort of thing um and um yeah but nah once I put once we put him on the formula, and that sort of thing um which we got told off for but I didn't give a shit because um he was sleeping, he was happy (SWD: Growing) he was, he had a happy mother and that sort of thing so what the hell you know, um why not. But he hasn't looked back, you know yeah. Yeah” (participant 715, p. 4)

Participant 715 described his partner as being upset, showing his awareness of her mental state, but although she was in the room during the interview he referred to her as “the mother” several times, perhaps to also distance himself from her. The level of distress he experienced is implied, but he does make some effort to describe his partner's emotions, and he specifies that his son being happy relieved his own worry about the situation (*“I didn't give a shit because um he was sleeping, he was happy”*). Although this participant had a positive view of his son, he was concrete and limited in his descriptions of his own and

others' mental states. He did not acknowledge mixed feelings or uncertainty, and when he did describe emotions he used dismissive phrases or minimised the unpleasant or complicated aspects of parenting.

Participant 704

Participant 704 was a mother describing her relationship with her youngest of five children, who was 11 months old at the time and the only one that she had in her care. This parent showed some areas of medium parental RF, but overall engaged in descriptions that were limited, concrete and lacked a thoughtful consideration of the infant's experiences during the specific situations that she described. However, at times she described her son's thoughts and feelings. In response to the question about how he reacts to being separated from her, she said:

"He cries. Yesterday he did because I had to go down to the-, he knew, he knew something wasn't right

[Interviewer: have there ever been any separations of more than a day?]

704: No because he's around me he's around me a lot and the only time I want to go and have time on my own (partner) looks after him. But I've got to get back because he gets he gets very emotional (laughs) when I'm not around (laughs).

[Interviewer: how is that for you, how do you feel?]

704: I feel upset myself. Cos he's my baby. Yeah and he's been around me all the time"
(participant 704, pp. 4-5).

In this excerpt, participant 704 describes her estimation of her infant's thoughts as well as his feelings, stating that he was emotional. Her affect was incongruent with the topic of separation, but she does acknowledge that she feels upset at being away from her son. She

states her feelings in simple ways but does not explicitly link these to her son's mental state. In pointing out that he has been around her "all the time" after she explains that she feels upset, she implies that her son is distressed at the change and that the thought of this is upsetting for her. However, this is not made explicit, and although she is reflecting, her capacity to clearly describe and interpret her own and her son's feelings is limited. When she describes her son's personality, she is enthusiastic and positive about him:

"He's full on, he's really full on.

[Interviewer: so what is it about (infant son) that makes you say he's full on?]

It's just, it's, he's always into things (laughs) Yeah and when you tell him no and not, not to do it he goes back and does it. And when he has a fall, I says oh well you know, well you had a fall, you know, don't do it again. But he does, he goes back and does do it again. And again. And it, it just carries on and carries on. So, he's always fallen, he's always yeah. He's always on my, I'm on my feet all the time with him. And now, now he's crawling properly oh my god yeah. We have we have to make sure we block everything up, especially outside and that. Yeah. Yeah he goes out and helps (partner) feed the rabbit. He feeds the rabbit. He's full on all the time, he's on my feet all the time, it's just the it's just the nights. It's just gets me (indistinct). Quarter past two in the morning...

[Interviewer: How else would you describe him?]

Um, he's always happy eh darling. Every, every morning, yeah, every morning he gets up, he, he climbs up on me and um, he's always, yeah, he kicks me to wake me up. And then he, he climbs over me and he goes (clicks tongue) so, yeah. And every time I look at him he's got this big grin on his face. Oh he's always happy every day.

[Interviewer: And what's another word to describe him?]

He's just, yeah, he's a perfect boy, yeah perfect. Lovable boy. Yeah, Yeah.

[Interviewer: yeah, so what makes you say that, perfect, lovable?]

Cos he is. He's, he's my pride and joy. Mine and (partner)'s. We're really, we're really happy that he's (indistinct). Yeah really active. And plus we, we're we're glad to have him in our care.” (participant 704, p. 7).

Participant 704's response to this question demonstrates her view of her son's characteristics. In using concrete examples of his behaviour, she describes the interaction between what he does and her experiences of this; she is tired by his high energy but very proud of him at the same time. She alludes to him not learning from his mistakes, showing inappropriate developmental expectations and a limited ability to accurately imagine his needs, abilities or desires while exploring his environment. This passage reflects the difference between capacity for parental RF and parental warmth or affection – participant 704 is both proud of her son and experiences joy in her parenting, but it also reflects her lower ability to mentalise with regard to her child.

Participant 738

Participant 738 was a mother describing her infant daughter who was seven months old at the time. She also had two older children, neither of whom had ever been taken into OOHC. This participant had acknowledged her own struggles with mental health during other parts of the interviews, and was warm and positive about her baby, yet her interview responses were rated a “2” for parental reflective functioning. The coder commented that “she uses ‘hard’ and ‘difficult’ throughout rather than articulate her actual feelings. Quite a bit of ‘you’ talk”. This mother was holding her baby while speaking about her, and her descriptions appeared to reflect an inner stream of consciousness, tailing off at the end of sentences or using whispers, murmurs and gasps towards her baby. Although many of the questions focused on her

feelings about her baby, her responses focused on concrete sequences of events and her thoughts at the time. For example, when she was asked about her reaction to seeing her baby for the first time, she focused on her baby's physical attributes and the events surrounding the birth, rather than her own internal emotional responses:

“It was like, I didn’t get to see her very long but when they had said that-that they had pulled her own on-on to the bed she had fallen out onto the bed, they-they grabbed her and-and they kinda let me have a short, very very short sort of glimpse and I-I could see of course I could that she, she did have hair when she was born even! So I knew what colour your hair was going to be, but I knew she would be a fighter from-from the start. Cos my age didn’t go to, um, thing, and I knew that I had already had very small babies to start with. Um, and I had had regular checks up at the hospital and they were going to induce me early anyway” (participant 738, p. 2).

This focus on her baby's physical attributes rather than characteristics, emotions and behaviours continued throughout the interview. In the section where she is asked to identify family and personality characteristics that she sees in her daughter, she responds by elaborating on physical similarities:

“[Interviewer: at this point, who does she remind you of]?”

At this stage, me. Yep. [Interviewer: in what ways?] A –a lot of people think she-she looks like me. She’s got the red hair and she’s-she’s- actually got her eye – her Dad’s colouring. “[Interviewer: and when did you first notice the similarity to you?] it took me quite a while cos when she was first born she looked just like her Dad. Yeah, just like her Dad. When she was born she was all legs and all arms. But as she’s getting older she’s looking more and more like me.

[Interviewer: and in what ways is she like her Dad?]

She-she's I can see him in-in her expression and in her hands. Especially in her hands.

[Interviewer: so are there any family characteristics on your family's side which you see in her personality?]

Um. I don't know, just how she is she-she reminds me of her-her brothers, and her-her cousins. Her first cousins my sister's boys because one of them is a redhead like a redhead and the other one's strawberry blonde so there's definitely a family resemblance (laughs) [Interviewer: and what about Dad's side?] Oh I think she will be very tall. She'll be tall. She'll get her height from her Dad" (participant 738, p. 5).

Later in the interview, participant 378 is asked explicitly about the relationship, and although the focus remains on her physical attributes at times, she also describes some of her own feelings:

"[Interviewer: so can you pick five words to describe your relationship, and maybe for each word describe like an incident or a memory that makes you say that?]

Well. I think the biggest words starts with her name, she is a survivor! That's what I would say, (infant) is a survivor. And um, I think she is beautiful aren't you darling? And that she-she-she's beautiful because she's my daughter and she's beautiful because she's got beautiful blue eyes don't you.

[Interviewer: what pleases you most about your relationship with her?]

That-that-that I can be together with her all the time, and be close to her. Yes.

[Interviewer: what do you wish you could change about your relationship with her?]

I don't think anything right now, but at the beginning I would have loved to have been able to have more contact. Yep. [Interviewer: how do you think your relationship with her has affected her personality?] Um. I think the biggest thing I have to do is to try to

be, um, try to remain like calm and um kind of relaxed. Cos it's hard when-when you have a busy household and things are coming and going and something may have happened and you might be a wee bit upset or something so. <strange voice to child about teeth, murmuring>

[Interviewer: so we were talking about how your relationship has affected her personality?]

Well I think, like what I said, if-if I stay calm, and-and if I am calm, and-and-and- if-if I keep eye contact and that and teaching you to hold her and comfort her. [Interviewer: yeah. So has your relationship with her changed at all over time?]

Yeah, we-we've been gotten closer. [Interviewer: and what's your feeling about that change?] I think it's good because now, now I-I can be close to her all the time. Yeah, all the time and we're not separated (participant 738, pp. 6-7).

In this excerpt, participant 738 initially refers to concrete physical attributes again, but when pressed with more complex questions she begins to implicitly acknowledge some of the more challenging aspects of parenting. Although she does not directly use an emotion-word to describe her own or her daughter's emotions, she identifies that some things are likely to lead to being "upset". She focuses on the behaviours and feelings she wants to show in the future, such as being calm, maintaining eye contact and closeness. In this way, she is rudimentarily acknowledging mental states in herself and her daughter. Yet she is not making this explicit, or linking her own feelings and behaviours to her daughter's subjective feelings and behaviours. When she is pressed, her capacity for reflective functioning regarding her daughter is present, but it is limited overall.

Medium Parental Reflective Functioning

Of the 26 participants completing the WMCI, the responses of 11 participants yielded parental RF scores classified as “medium” (a four or five). No participants’ transcripts yielded scores of six or more. Scores of four or five encompass levels of reflecting functioning described as “rudimentary or inexplicit mentalization” and “definite or ordinary reflective functioning” respectively . For scores of four, mental state language is used, but these are not clearly or explicitly linked with feelings and behaviours in self and others. Scores of five are given for convincing descriptions of mental states that suggest the participant holds a model of both their own and their child’s mind. Excerpts from two of the 11 medium parental RF transcripts are given and discussed below, demonstrating some of the responses given by parents within this category.

Participant 710

Participant 710 was a mother describing her relationship with her infant daughter aged five months, and she was one of only two participants whose transcripts were rated a five for parental RF. She also had an older child who had never been taken into OOHC. The coder commented that “baby is only five months but mother has clear view of her as having her own mind and preferences. Doesn’t always fully link mental state to behaviours”. Participant 710 often described her baby as having strong preferences, and easily linked these to her baby’s behaviours and her own responses and thoughts. When asked about whether her infant gets upset often, participant 710 replied:

“Oh no she just has her moments like with her bottle and when she can’t hold her bottle herself, because she doesn’t like someone sitting there holding her bottle for her. And she doesn’t like being held to be fed, she likes her independence. She gets upset with (older daughter) because (older daughter) is always in her face, so she she cries about that because she doesn’t like it.”

[Interviewer: and what do you do when that happens?]

I tell (older daughter) that you've got to leave her personal space alone and then she says "But that's my (infant daughter)" and I say "No that's actually my (infant daughter) and she's your sister and she doesn't want you in her face baby." And (older daughter) will kind of steal her blanket or steal her dummy and be like haha I got your dummy, I got your blanket.

[Interviewer: and what do you feel like doing at those times?]

I just laugh to be honest.. And I'm like just give her her blanket back and she just thinks.. And (infant daughter) just looks at her thinking oh I'm going to get my blanket back anyway. But yeah sometimes when (older daughter) is in her face she'll scream and squirm and try to get away from her. I try not to tell (older daughter) off too much because I don't want her to start hating (infant daughter) and to start taking stuff out on (infant daughter). Because I feel that if I keep going no no no then (older daughter) is going to start flashing back and start hurting (infant daughter) any chance she gets"
(participant 710, p. 8).

In the above excerpt, participant 710 explicitly refers to her daughter's internal thoughts, and links these with her behaviours of crying and screaming. She also hypothesises about the future thoughts and feelings of her older daughter, expressing concern that her own reactions (scolding) might inadvertently be harmful and impact on her younger daughter's safety. Participant 710's feelings are not described fully here, but the next question elicits her own feelings about her daughter's emotions much more clearly, with the interviewer requesting a description of a time when her infant was emotionally upset:

"When she's had her injections, I mean I stressed out myself, I cry myself. I can't hold her, the nurses have to put her on the bed Because I'm scared that I might move and

that the needles gonna snap inside of her legs or something like I'm real dramatic when it comes to stuff like that so... I have to turn away and then they pick her up and pass her to me and I have to like cuddle her for at least two minutes And they keep saying the more you stress it the more she's gonna keep crying. Still I have my moment and then I get over it and then she's good. That's pretty much only me, she's actually quite happy" (participant 710, p. 8).

This section demonstrates the parent's ability to see her daughter's subjective experiences as different from her own; participant 710 acknowledges that her own intense feelings of distress are not necessarily mirrored in her daughter. Later, when asked about what she likes about her relationship with her daughter, participant 710 says:

"I like how she smiles and looks at me. Like even if I just smile and she'll just smile back at me. I like that she is happy and that she actually cuddles. Like some babies, you know, they're just flailing around like they don't care but when you pick her up like she'll cuddle you. And she'll touch your face and, you know, actually make sure that you're there and that you're not some stranger whose just picked her up and acting like her mother" (participant 710, p. 13).

In this way, participant 710 actively interprets her daughter's actions and sees them as reflecting her personality and thoughts. This was consistent throughout the transcript. Although there was plenty of evidence for parental RF, there was no evidence that participant 710 was capable of reflection on more nuanced or complex interpersonal processes, which would have yielded a higher RF score.

Participant 726

Participant 726 was the mother of a 17 month-old infant boy. She had two older children who were in OOHC, and her parental RF score was four. This participant's WMCI responses were

shorter than most parents', and she sometimes struggled to remember details about her son. The coder commented that she showed "confusion about age for various milestones", and noted that she "used facial expressions rather than name[d] child's feelings". The following responses were given to the question about whether there had been any separations of more than a day or two. Note that prompting from the interviewer was more frequent than for other participants (although this does not impact on parental RF score):

"Just to preschool [Interviewer: And that's it?] Yeah... he's hasn't been with anybody else. [Interviewer: How does he react?] He likes preschool now. He didn't at the start [Interviewer: How did he react at the start?] At the start he just cried and cried ... Oh his his first visit was good ... He didn't understand what was going on and then the next time I went to drop him off, he knew I was leaving and he didn't like it, and then...and then he started getting used to it, yeah, and then he started getting used to it and then when he got sick and he had those weeks off, when we took him back he didn't want to go, he used to cry and try and chase after us and stuff out the door

[Interviewer: And how was it for you being separated when he was upset]

026: I (laughs) I didn't like it. I used to want to just take him home and I used to go the car and say oh which shall we just go and get him, because I didn't want to leave him [Interviewer: And what did you do?] Used to just let him (laughs) never used to go back and get him, because it would just make it worse, cos then he'd do it every time but now he's really good, now he doesn't mind because it's part of his routine he knows, so when he goes there he gets his lunch like I get his lunchbox out and he grabs his yoghurt out and he goes and jumps into a highchair and sits down and has his lunch and I leave [Interviewer: So that's the routine] Yeah. And he knows it" (participant 726, pp. 5-6).

In this excerpt, participant 726 explicitly refers to her son's experience of separating from her at the preschool drop-off. She comments on his understanding, showing that she is aware of his limitations and the impact this has on his distress. She links his observable behaviour of participating in preschool routines to his feelings, although instead of labelling the feelings clearly she labels his expression and the associated thought ("he's really good, he doesn't mind..."). In this section, she does not refer to her own emotions during his distress and settling-in phase. At a later point, when asked to describe her own experience of her child being physically ill, she does describe her feelings and thoughts:

"I kind of, I kind of felt really helpless, cos there was nothing we could do for him. And it then I was like worried because he wasn't eating or drinking, cos every time he would, he would vomit so I was kind of like just I don't know, sitting there waiting and waiting for him to get better" (participant 726, p. 6).

In the above section, she describes multiple concurrent feelings and uses some tentative language, both key elements of parental RF. She felt both helpless and worried, and acknowledged that her own uncertainty at that time and in the present moment. Later on in the interview when she describes his personality, she continued to link his actions and his thoughts, and refers to her son's mentalising too:

"...[H]e laughs and he thinks it's really funny I don't know why but he just does really funny things and he knows it's funny and he looks you and he laughs about, he just, he's really funny"

[Interviewer: cute. And what about stubborn?]

Oh if he doesn't want to do it, he won't. He just he won't. There's just uh you can't you can't sort of persuade him any other way, if he knows what's coming and he doesn't like, he won't do it, he won't go near it.

[Interviewer: What about cheeky?]

*He's real cheeky. He um he'll do things that he knows he's not allowed to do, and he'll look at you as he's doing it and he's like *pulls face* and he looks at you going no, don't do that and he'll pull his hand in and he takes two steps back and then he goes back in again and he just keeps go-. And then he always looks at you with this cheeky grin on his face like haha I've got you and you sort of playing this game with him, but it's his game" (participant 726, p. 8).*

The infant's own sense of humour and initiated social interactions are acknowledged as being separate from his parents' here; participant 726 describes his ability to begin a game with her, and what she thinks his thought processes are during that game. Similarly to earlier excerpts, however, she describes behaviours and actions to infer his emotional state without labelling them explicitly or linking them with her own emotions in the past or present. Overall, the transcript showed that she was able to imagine and infer the mental state of her son based on his behaviour and situational factors, and describe her own emotions and thoughts, but struggled to link the two together into a coherent narrative that would have given a higher parental RF rating.